"Need for a State Infirmary for the Care and Treatment of Aged, Infirm and Chronically Ill Persons"*

*Number 470 of the Special Acts of 1943

A Report

to

The 1945 General Assembly

by

The Public Welfare Council

And

"Suggestions Concerning State Infirmaries for the Aged, Infirm and Chronically Ill"

by

The Connecticut Public Expenditure Council, Inc.

Hartford, Connecticut
1944

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A Report

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The 1945 Connecticut General Assembly

by

The Public Welfare Council

Including a Comprehensive Program for the Care of 26,000 Chronically Ill Persons

Hartford, Connecticut

1944

Printed under authority of Section 142, General Statutes of Connecticut, Revision of 1930, as amended by Section 45e, Supplement of 1939.

JOHN M. DOWE
State Comptroller

NUMBER 470 OF THE SPECIAL ACTS OF 1943

AN ACT CONCERNING A STUDY BY THE PUBLIC WELFARE COUNCIL OF THE NEED FOR A STATE INFIRMARY FOR AGED, INFIRM AND CHRONICALLY ILL PERSONS.

The Public Welfare Council shall investigate and inquire into the need for a state infirmary for the care and treatment of aged, infirm and chronically ill persons and shall report its findings to the 1945 general assembly.

Approved, June 30, 1943.

December 18, 1944.

HON. RAYMOND E. BALDWIN, GOVERNOR
AND
GENERAL ASSEMBLY, STATE OF CONNECTICUT

STATE CAPITOL
HARTFORD, CONNECTICUT.

GENTLEMEN:

The Public Welfare Council, in accordance with Section No. 470 of the Special Acts of 1943, has made a study of the need for a state infirmary for the care and treatment of aged, infirm and chronically ill persons and herein reports its findings and recommendations.

The findings and recommendations are based upon the study made by its Research Division under the guidance of Dr. Karl F. Heiser, Research Director, a copy of which accompanies this report and is made a part thereof. The study and the findings and recommendations of the Council relate entirely to the need for care of *public assistance cases*. The mentally ill and other institutionalized groups are not included in the study and recommendations. Some relief, however, will be given to the mental hospitals by the transfer of certain senile and other patients from the mental hospitals to the proposed infirmaries. (See page 40.)

We would like to emphasize at the beginning of this report the fact that the estimated operating costs are gross costs with no estimate of income from patients. Naturally, a substantial part of the operating cost will be regained from patients in the same manner as they now are in other state institutions and services.

We also call attention to the list of cooperating and assisting agencies and individuals in the study set out on pages 82 and 83, inclusive, of the appendix and express our great appreciation for their assistance.

Our study and recommendations, naturally, do not and could not go into details of the building program or the organization and administration of the recommended hospitals, infirmaries and homes or of the outpatient clinics and encouragement of public health nursing. We have studied and reported on the existing needs and outlined a general broad program for action. We do not recommend that it all be initiated at once, but that it should be spread over a period of some years. We do hope and express the belief that a substantial beginning should be made at this time and we have set out below the order in which the program should be undertaken, in our best judgment, and the extent to which it should be undertaken at this time.

The fundamental concept behind the study and recommendations is better and more adequate care for the present public assistance recipients. No shift in the financial responsibility for care from town to state or vice-versa is involved in the recommendations.

The program recommended is based on the belief that the state is better able to construct and operate the buildings and services necessary for the proper care of the chronically ill and aged on the basis of more economical and better care than any other unit of government. The economy is in an integrated and well organized program and operation and in the handling of additional needs not now being adequately cared for in either public or private institutions.

Our recommendations are divided into three parts: (1) Building program; (2) Non-institutional program; and (3) Administration; and are as follows:

Building Program

1. We recommend that an immediate program in respect to infirmaries be undertaken to the extent of providing 3,000 beds (see page 47 of the report and discussion commencing on page 36). The size and location of infirmaries should be substantially in accord with recommendations on page 47 of the report.

2. Next in order of importance in our judgment is boarding homes for the aged. We recommend that they be established by the state to the extent of 1,000 beds and be located substantially as recommended on page 47 of the report.

3. We believe that additional hospitalization facilities for the chronically ill are needed in the state to take care of those types of chronically ill who require more intensive care, such as surgery and special treatments for cancer, than is supplied at the infirmary level. However, a bona fide question of policy which the Council has not resolved is whether such care should be provided through the construction of a new state hospital or through existing general hospitals by the addition of necessary beds with the help of the state. Therefore, at this time, the Council does not make specific recommendations as to procedure, but does point out that there is an estimated need of approximately 1,000 additional beds for this type of patient as set out in the report on page 41 et seq. and page 47.

The estimated construction and gross operating costs for this program are found on page 47 of the study.

Non-Institutional Program

The following recommendations are preventive in nature, but tie in with the recommended institutional program:

1. We recommend that the state encourage the expansion of public health nursing by authorizing direct payment of standard fees to public health nursing agencies for visits to public assistance cases. It is estimated that there are now about 4,000 persons in the state who need occasional nursing service in their homes, which service is not now available. Public assistance social workers constitute the point of contact with the patients and should be equipped to arrange for needed nursing service of this type which would average one visit a week at an estimated cost of $200,000 a year. (See discussion on page 36 et seq. and page 47.) Any

appropriation for such purpose, however, should not be limited solely to use in fee payments, as there may be other ways of assisting in building up the existing public health nursing organizations in the community. It is to be noted that this recommendation is not to set up a state nursing organization but to make use of existing agencies and enable them to provide more services to public assistance cases.

2. We recommend that out-patient clinics, for the use of public assistance cases, be established in any state infirmary or hospital for the chronically ill that may be constructed and also in general hospitals. This program is now carried on by a good many private institutions for the benefit of everyone in the community and occasionally aided and abetted by the state. The idea of out-patient clinics is universally recognized as a desirable adjunct for home medical care and as a device to prevent the institutionalization of certain patients. Such clinics should be established for public assistance cases wherever there is sufficient concentration to warrant them. The program merely calls for the cooperation of the state with general hospitals to establish such clinics for public assistance cases. This does not mean setting up separate clinics for public assistance cases where clinics now exist, but merely means setting up within existing clinics a procedure whereby public assistance cases will be routed to one or more authorized professional persons within such clinics who will handle this type of patient.

Administration

We recommend that one board or commission be created to build, operate and carry out the above recommended program in its entirety—it should not be divided up as to administration. Such an arrangement would not seem to conflict with the authority of any present existing board, commission or department head.

We recommend that the board should not be too large, but we do recommend that it include the state Commissioner of Health, state Commissioner of Welfare and representatives of the medical profession and of the public. Because the financial responsibility for using the proposed facilities (similar to present existing programs) is both a state and a town matter, at least one of the public representatives should be well versed in town welfare administration.

The board or commission would naturally have to have a paid executive. Such paid executive should rate as to salary with the head of any institution or present commission executive.

The foregoing are the recommendations of the Council. As stated in the beginning, we feel that the recommended program should be substantially authorized by the present legislature. It will take considerable time to work out details and specific plans, both as to building program and operation. The recommendations as to the encouragement of public health nursing and the establishment of out-patient clinics can immediately go forward, but it is essential that the whole program be placed under one body at the beginning so that it can be worked out in an integrated manner.

We venture to suggest that if the legislature desires to go forward with the program that a special committee, or sub-committee, be appointed to handle the matter. The underlying statistical information is available and is substantial in quantity. The services of the Research Division of the Council are also available to any such committee.

A study was also made by the Connecticut Public Expenditure Council on some of the financial aspects of our recommendations. The Public Expenditure Council became interested in our study early in 1944 and there has been mutual cooperation in the exchange of statistical data between us. Their report, however, is based on independent study and we mutually assume no responsibility for, or endorse, the findings in the other's reports. We asked for and obtained consent to file their report with ours because the two were directed toward the same subject and have more value as a unit than if separated. The Public Expenditure Council's study was made primarily from the viewpoint of the town and the possible savings that might be effected by the proposed state program on the present level of load, but not taking into consideration, to any great extent, the need for additional care.

Respectfully submitted,

Austin D. Barney, *President*
Public Welfare Council.

FOREWORD

There are probably 100,000 persons in Connecticut handicapped by illness or physical disorder that has persisted for at least six months or has become chronic in nature.

The present study is concerned primarily with that section of the population which depends partially or wholly upon public assistance from towns or the state. In January, 1944, there were roughly 40,000 persons receiving direct or indirect assistance. In this group, there are about 20,000 chronically ill or disabled adults who form the population for discussion in the main part of the report. These 20,000 are in addition to some 13,000 patients now receiving care and treatment in special hospitals or institutions for the mentally ill, defective, blind, deaf and tubercular.

Approximately $6,500,000 is now spent in assistance and care of the 40,000 persons mentioned above. This money is spent carefully and judiciously within the framework of our laws and public assistance policies, but it does not provide adequate medical and health care for a large proportion because the facilities through which such care might be provided are not available.

The report deals with the health and socio-economic circumstances of the 20,000 chronically ill and recommends a program which will provide minimum facilities through which an adequate program of treatment, care and prevention might be operated. The estimated cost of operating the recommended program is approximately $1,000,000 in excess of the present public assistance costs, yet it is possible that such an expenditure would result in some corresponding economic savings in other directions as well as bring the benefits of modern medical knowledge to a large section of our population.

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THE NEEDS OF THE AGED AND CHRONICALLY ILL OF CONNECTICUT

I. INTRODUCTION

This study was undertaken at the direction of the 1943 General Assembly for the immediate purpose of supplying factual information to guide the state's program of caring for the dependent aged and chronically ill. Such information was to be useful in answering questions such as the following:

1. How many Connecticut residents are incapacitated or prevented from leading productive self-sufficient lives because of prolonged illness or physical debility?
2. What specific disorders or illnesses are responsible for this situation?
3. What kind of care are these persons getting?
4. What kind of care do they need?
5. How many of these persons are dependent partially or wholly upon public assistance?
6. What is the cost to taxpayers of this assistance?
7. How much would it cost to give proper treatment and care to these persons?
8. Could the provision for care *now* prevent certain persons from becoming permanently disabled and dependent upon public assistance later?
9. Would a medical care program for these persons mean a reduction in public welfare and other costs?

These practical questions were held as a guide for the study, although they did not limit the scope of the work. Since the state was investing approximately $10,000 in the study, it was felt that other information should be gathered at the same time which could have a supplementary or future value for state and public health officials who might be concerned with these problems.

The present report is purposely as brief as it is possible to make it without omitting essential data which might serve as a guide to answer the above questions. Statistical tables are simplified or omitted entirely. The reader should remember, however, that every statement or opinion given in the text is based upon data collected in this study, unless some other source is specifically mentioned. That is, data are on file in the Research Division of the Public Welfare Council to support statements in the text. Appendix II, D, page 81 gives a list of the prepared tables available to any interested person.

It is expected that a complete report will be published later for the use of research workers and public health and government officials who might derive some help from this Connecticut study.

II. BACKGROUND

The proper concern of the state is the health and welfare of all its residents. In the present problem of the chronically ill and aged, however, the primary interest is in furnishing medical and other facilities to those who are economically dependent.

The general policy of public assistance programs has been to provide enough monetary aid to enable the recipient to meet elementary economic needs of shelter, food, clothing and medical attention. Public assistance recipients have been considered primarily as deficient in income. Welfare officials have aimed, logically, to supplement this deficient income.

Another approach to the welfare problem is by the more analytical method of first asking why the applicant needs assistance. The answers to this question fall into two main groups: (1) no employment is available or (2) applicant is unemployable. The relative size of these two groups changes with the general level of economic activity of the community. At a time such as the present, almost every able-bodied person is productively engaged and many partially disabled people are occupied in some remunerative employment. Most of those who receive public assistance today (2.5% of the population) are apparently unemployable under any circumstances. It is possible, therefore, that they are unemployable because of a chronic condition or illness of the body or personality. Pursuing this analytical point of view to its logical conclusion may reveal that the public assistance or "relief" burden of a community is largely a public health problem and that the prevention of disease and chronic illness might substantially reduce the burden of public assistance. It is well known, for example, that the number of industrial workers away from their jobs in Connecticut industries in 1943, because of illness, was almost identical with the manpower shortage, i.e., there would have been no manpower shortage if absenteeism ascribed to illness had been prevented.[1]

III. METHOD

A. Population Studied

Since any program of care for the chronically ill and disabled upon which the state might embark should be primarily for the benefit of public assistance recipients, such beneficiaries were the first subjects of the study.

The population falls into the following economic groups or combinations of these groups: (1) self-supporting, (2) dependent upon private assistance and (3) dependent upon public assistance. With the passage of time, there is a tendency for those afflicted with illness to shift from one group to the next in order, because personal resources are the first to be exhausted, then private resources, and finally the individual is dependent upon public aid. It is naturally the goal of any society to have as many members as possible in group 1. The standard of living of the community depends almost entirely upon this group. It contains the bulk of the productively employed who actually carry the burden of all others.

In view of this tendency, it seemed certain that many of the chronically ill who are now known only to private agencies will become the future applicants for public assistance. Therefore, an estimate was desired as to the number of chronically ill and disabled who are clients of private agencies. The total population for this study, then, was the clientele of

[1] Statement by an official of the War Manpower Commission.

town and state public assistance and health agencies and private health organizations such as general hospitals and visiting nurse associations.

The data for the study of adults, aged twenty and over, were secured from the files of the following agencies: Old Age Assistance, town welfare departments, town farms or homes, Aid to the Blind, Board of Education of the Blind, private agencies, such as visiting nurse associations and hospitals, and miscellaneous institutions. Information as to chronic disability among age groups under twenty years was obtained from the Division of Child Welfare, the program of Aid to Dependent Children of the Office of Commissioner of Welfare, the Division of Crippled Children of the State Department of Health, and the Mansfield-Southbury waiting list. These latter groups are likely to include many who will continue to need public assistance and medical care as adults, but detailed information on them will be found in the appendix, page 54, as it was not specifically requested in the legislative act ordering this study. Since any inclusive study of chronic illness and dependency should include all age groups, a total compilation is given in appendix I, D, page 70.

The present study does not include all the chronically ill and disabled adult residents of Connecticut. It covers only 19,858 persons from the above mentioned adult agencies, and 6,145 persons from the children's agencies, making a total of 26,003. See table 16, page 74, appendix I, D. Neither does it attempt to represent some 50,000[1] other Connecticut residents who have some handicapping physical disorder yet are not known to or dependent upon the agencies which collaborated in this study.

This study does not include some 13,000 patients who are now receiving a specific type of care or treatment in institutions for the mentally ill, the mentally defective, the blind, the deaf and the tubercular.

B. *Case Study*

It was impossible, within the limits of time, personnel and budget, to make a thorough case study. This would have required the services of a physician and a social worker who were experienced in the field of chronic diseases to make individual personal examinations of the group studied and to check hospital records of the past several years.

Two closely related methods were followed, one for all public agency records and the other for records of private agencies. In the former, research workers employed and trained by the Research Division of the Public Welfare Council analyzed the written case histories in the agency files. These workers did not make diagnoses in any cases, but merely copied diagnoses and evidence of illness given in records and reports. In the latter, reports of cases taken from private agency records were made

[1] If the findings of previous studies done in Massachusetts, New York City and elsewhere may be accepted as true also of Connecticut, there should be a total of approximately 90,000 state residents who meet our definition of chronic illness. Since the study includes 26,000 cases, and 13,000 are institution residents, there are approximately 51,000 not included in the study.

United States Public Health Service, Division Public Health Methods. National Health Survey, 1935-36, Sickness and Medical Care Series, Bullentin No. 6, "The Magnitude of the Chronic Disease Problem in the United States." Washington, D. C., 1938.

Bigelow, G. H. and Lombard, H. L. "Cancer and other Chronic Diseases in Massachusetts." Houghton Mifflin Company, New York, 1933.

Jarrett, M. C. "Chronic Illness in New York City, Vols. I and II." Published for the Welfare Council of New York by Columbia University Press, New York, 1933.

to the Research Division by a responsible agency official, physician, head nurse or medical social worker, who had received certain definitions and instructions from the Research Division to guide him in his analysis of records. In this way, persons whose illnesses were reported remained anonymous even to the Research Division staff.

C. *Date of Study*

January, 1944, was chosen as the time for this census of chronic illness; i.e., there had to be evidence that a person was suffering from a chronic disorder in January, 1944, for the case to be included in the study. Thus the results obtained should indicate the actual census of chronic disorder at that time.

D. *Definition of Chronic Illness*

With the approval of medical advisors,[1] the following definition of chronic illness was used:

"A disease or condition of the body or personality which has been present at least six months or which may be expected to continue at least six months and which interferes with one's occupation and normal physical and social life."

Those responsible for this study considered it suitable to include psychiatric illnesses and mental deficiency because such disorders are disabling and disturbing of productive occupation. Persons suffering from them are as much in need of care, protection or supervision as if they had such purely physical diseases as arthritis or diabetes.

E. *Code List of Chronic Disorders*

With the advice and approval of specialists[1] and with the guidance of previous studies of chronic illnesses[2] a list of sixty-one classifications of the most common disorders was prepared for this study (See Figure 1). It would have been possible to use a list many times as long, but the final choice was based upon three considerations:

1. The diagnostic terminology found in case histories.
2. The relationship between diagnosis and needed care, i.e., two diagnoses should not be combined, even though related, if they require different types of nursing and medical care.
3. The desirability of brevity.

For ease in identification, diseases were grouped under twelve major headings which correspond to those used in the International List of Causes of Death,[3] a system in wide use by other nations, states and agencies. The same plan was followed in coding secondary chronic disorders in those persons who had two or more such conditions.

---

[1] Members of the Advisory Committee to the Public Welfare Council on the care of the Chronically Sick and Infirm:
James Raglan Miller, M.D., Hartford, Chairman.
Wilmar M. Allen, M.D., Director, Hartford Hospital.
Creighton Barker, M.D., Secretary, Connecticut State Medical Society.
H. Gildersleeve Jarvis, M.D., President, Connecticut State Medical Society.
Eugen Kahn, M.D., Yale University School of Medicine.
George M. Smith, M.D., Yale University School of Medicine.
Charles H. Sprague, M.D., Chairman, Veterans' Home Commission.

[2] See Footnote on Page 3.

[3] U. S. Bureau of the Census, "Manual of the International List of Causes of Death (Fifth Revision) and Joint Causes of Death (Fourth Edition) 1939". U .S. Government Printing Office, Washington, D. C.

FIG. 1

CHRONIC ILLNESS IN CONNECTICUT—1944

LIST OF ILLNESSES FOR SURVEY SCHEDULE CODING

Epidemic and Communicable
00 Other
01 Pulmonary tuberculosis
02 Non-pulmonary tuberculosis
03 Venereal diseases
04 Poliomyelitis (deformity and paralysis)

Rheumatism, Nutritional and General Diseases
10 Other
11 Rheumatism and arthritis
12 Diabetes
13 Goitre
14 Rickets
15 Chronic alcoholism
16 Chronic drug addiction
17 Avitaminosis and malnutrition
18 Chemical poisoning
19 Due to physical agents

Diseases of Heart, Circulation and Blood
20 Other
21 Diseases of heart
22 Arteriosclerosis
23 Anemia
24 Varicose veins

Diseases of Nervous System and Sense Organs
30 Other
31 Apoplexy, hemorrhage, shock
32 Epilepsy
33 Encephalitis
34 Paralysis
35 Organic nervous disease
36 Neurasthenia and functional
37 Mental deficiency
38 Blindness
39 Diseases of eye or ear

Diseases of Respiratory System (non-tuberculous)
40 Other
41 Asthma
42 Chronic bronchitis
43 Hemorrhage and chronic congestion of lungs
44 Dust inhalation

Diseases of Digestive System
50 Other
51 Diseases of gall bladder
52 Hernia
53 Ulcers of stomach
54 Cirrhosis and other diseases of liver

Diseases of Genito-Urinary System (non-venereal)
60 Other
61 Nephritis
62 Other kidney diseases
63 Diseases of prostate

Diseases of Skin, Bones and Muscles
70 Other
71 Ptosis
72 Diseases of skin
73 Diseases of bone
74 Leg ulcers (varicosity not indicated)

Deformities, Malformations and Results of Accidents
80 Amputated limbs
81 Birth injuries and congenital defects of nervous system
82 Spinal deformities
83 Deforming accident (industrial)
84 Deforming accident (other)
85 Orthopedic disorders (non-poliomyelitic)
86 Congenital malformations (except C.N.S.)

Old Age and Senile Deterioration
90 Feebleness due to age
91 Senile dementia

Cancer and Other Tumors
X0 Other
X1 Malignant tumors
X2 Benign tumors and cysts

Ill-defined and Other Diseases
Y0 Other
Y1 Ill-defined

F. *Data and Code Sheets*

Figures 2, 2a and 3 show the data sheets used by the research workers in this study. The sheet used in the study of public agency records (Figure 2) is so arranged that the data may be indicated by code numbers placed in boxes or by circling numbers which represent particular facts. The

data reported on private agency sheets (Figure 3) were transferred to the code sheets used for public records (Figure 2) and all data were then punched on Hollerith cards for statistical treatment. Figures 2 and 2a show the variety of information gathered. Only the most pertinent of these data are summarized in this report.

FIGURE 2.

CODE SHEET

CHRONIC ILLNESS IN CONNECTICUT—1944

Definition of Chronic Illness: A disease or condition of the body or personality which has been present at least six months or which may be expected to continue at least six months, and which interferes with one's occupation and normal physical and social life.

Name.....
Last First Middle

Address.....
No. Street Town

Previous address.....
No. Street Town

Chief Illness.....

Secondary Illness.....

1	2	3	4	5	6

7	8	9

10	11

12	13

14. *Birthdate*

Unknown	x
Before Jan. 1869	0
1/'69 to 12/'73	1
1/'74 " 12/'78	2
1/'79 " 12/'83	3
1/'84 " 12/'93	4
1/'94 " 12/'03	5
1/'04 " 12/'13	6
1/'14 " 12/'23	7
1/'24 " 12/'33	8
1/'34 " 12/'43	9

15. *Birthplace*

Unknown	x
Town of residence	0
County of residence	1
Connecticut	2
New England	3
North America	4
N. W. Europe	5
Central Europe	6
Southern Europe	7
Eastern Europe	8
Other	9

16. *Sex and Marital Status*

Unknown	x
Man M. S. unknown	0
Woman M. S. unknown	1
Single man	2
Single woman	3
Married man	4
Married woman	5
Divorced or separated man	6
Divorced or separated woman	7
Widowed man	8
Widowed woman	9

17. *Duration Present Residence* (Since.....)

Unknown	x
Less than 2 mo.	0
2 to 4 mo.	1
5 to 7 mo.	2
8 to 11 mo.	3
1 year	4
2 years	5
3 to 4 years	6
5 to 9 years	7
10 to 14 years	8
15 years and over	9

18, 19. *Living With*

	Now	Previous
Unknown	x	x
Self — alone	0	0
Own family	1	1
Rooming house	2	2
Boarding house	3	3
Convalescent home	4	4
General hospital	5	5
Mental hospital	6	6
Tubercular hospital	7	7
Penal institution	8	8
Other	9	9

20. *Public Assistance*

Unknown	x
No	0
State, public assistance	1
County	2
Town	3
City	4
Workmen's compensation	5
Veteran's awards	6
Federal	7
Two of above	8
Three of above	9

FIGURE 2a.

21, 22, 23. *Amount Aid Received*	Public Agency	Private Agency	Other Agency
Unknown	x	x	x
None	0	0	0
.01- 2.99	1	1	1
3.00- 5.99	2	2	2
6.00- 8.99	3	3	3
9.00-11.99	4	4	4
12.00-14.99	5	5	5
15.00-17.99	6	6	6
18.00-20.99	7	7	7
21.00-23.99	8	8	8
24.00 and over	9	9	9
Aid "in kind"			

24. *No. Agencies Aiding*	
Unknown	x
Public only	0
Public and private	1
Public, private and other	2
Private only	3
Private and other	4
Other only	5

25. *Present Earnings per week*	
Unknown	x
Nothing	0
.01- 4.99	1
5.00- 9.99	2
10.00-14.99	3
15.00-19.99	4
20.00-24.99	5
25.00-34.99	6
35.00-49.99	7
50.00-69.99	8
70.00 and over	9

26. *Education*	
Unknown	x
None	0
Less than 4 yr.	1
4 to 7 yr.	2
8 yrs.	3
1-3 yr. H. S.	4
H. S. grad.	5
1 to 3 yr. Coll.	6
College grad.	7

27. *Last Regular Occupation*	
Unknown	x
None	0
School or institution	1
Own housework	2
Prof. and semi-prof.	3
Prop., mgr. and officials	4
Clerical, sales, etc.	5
Craftsmen and foremen	6
Operatives and kindred	7
Service workers	8
Domestic and unskilled	9

28. *Mental Abnormality*	
Unknown	x
None	0
Suspected	1
Senile dementia	2
Invol. and manic depressive	3
Schizophrenia	4
Organic (C. N. S.)	5
Due to systemic disease	6
Psychopathic personality	7
Other	8

29, 30. *Care:*	Present	Needed
Unknown	x	x
None	0	0
Attend., personal	1	1
Nursing	2	2
Medical	3	3
Attend. and nursing	4	4
Attend. and medical	5	5
Nursing and medical	6	6
Attend., nurs., med.	7	7
Other	8	8

Evidence of needed care:

31. *Quality of Care*	
Unknown	x
Satisfactory	0
Not satisfactory	1

Evidence:

32. *Present Condition*	
Unknown	x
Bedridden	0
Wheelchair	1
Partially ambulatory	2
Wholly ambulatory	3

33. *Vocational Rehabilitation*	
Unknown	x
Possible	0
Impossible	1

34. *Diagnosis of Chief Illness by:*	
Unknown	x
Physician	0
Nurse	1
Social worker	2
Patient	3
Other	4

35, 36, 37. *Duration:*	Present Illness	Incapacity	Future Illness
Unknown	x	x	x
Less than 3 mo.	0	0	0
3 to 5 mo.	1	1	1
6 " 11 mo.	2	2	2
12 " 17 mo.	3	3	3
18 " 23 mo.	4	4	4
2 " 4 yr.	5	5	5
5 " 9 yr.	6	6	6
10 " 14 yr.	7	7	7
15 " 19 yr.	8	8	8
20 yr. and over	9	9	Life 9

Evidence (Fut. Ill.):

38. *Source of Data*	Col. 39
Unknown	x (x)
State Welfare	0
State Health	1
Town	2
City	3
State Hospital	4
General Hospital	5
Workmen's Comp.	6
B., C. & C. home	7
Private agency	8
Other	9

FIGURE 3.

Chronic Illness in Connecticut—1944

Report from private agency to
Public Welfare Council - Research Division

_____
Agency

_____
Address

DEFINITION OF CHRONIC ILLNESS: A disease or condition of the body or personality which has been present at least six months or which may be expected to continue six months, and which interferes with one's occupation and normal physical and social life.

INSTRUCTIONS: The definition above is a broad one; please consider it thoroughly before selecting cases from the records of all patients receiving treatment during January 1944. Then give as much of the following information as possible.

Street addresses are desired only for the purpose of checking for duplication; not for identification.

The "chief illness" is the disorder most responsible for the disablement of the patient. For example, if a person has arteriosclerosis and is paralyzed, the paralysis is the chief illness. If possible, give the underlying cause of the chief illness in such cases. Many patients suffer from two or more chronic illnesses concurrently; give, at least, the chief of the secondary illnesses.

The following information applies to the period of treatment, January 1944.

1. Patient No. ..... Home Address ..... (No. / Street / Town)
2. Birthdate ..... Birthplace ..... Sex .....
3. Marital status: Single ..... Married ..... Separated ..... Divorced ..... Widowed .....
4. Illnesses: Chief ..... Secondary .....
5. Who made diagnosis of chief illness? Doctor ..... Nurse ..... Social worker ..... Other .....
6. Was patient in an institution? ..... days ..... (Name of Institution / Town)
7. Was patient kept in General Hospital for lack of chronic facilities? .....
8. When did chief illness begin? ..... How long has patient been disabled? .....
9. How long will disability persist? ..... Is vocational rehabilitation possible? .....
10. What kind of care or treatment did you provide? .....
11. Was the care or treatment of this patient satisfactory? .....
12. What kind of treatment was needed, if any, that was not provided? .....
13. Condition: Ambulatory ..... Partially ambulatory ..... Wheelchair ..... Bedridden .....
14. Did patient have a mental disorder? ..... Doctor's diagnosis .....
15. How far had patient gone in school? .....
16. What was patient's last or regular occupation? .....
17. How much was patient earning during period of treatment? $..... per week
18. From what other agencies was aid received during January? .....

.....

19. General comments .....

.....

.....

.....

20. This information was checked and approved by ..... (Name / Title)

G. *Sampling Procedure, Sources of Errors and Limitations*

To save space in the body of the report, these topics are discussed in appendix II, A, page 77.

IV. RESULTS

Preliminary investigation indicated that the problems of care of the indigent aged and the chronically ill are not separate, but are closely interrelated. At the present time the chief problem is the care of the chronically ill, largely because most people who are in need of public assistance are incapacitated by chronic disorders of some sort. The results of the present study may be taken to indicate minimal needs only, as it is apparent that many more cases of chronic illness would be discovered if our public assistance rolls were longer, as they would be under normal economic activity.

A. *Chronic Illness by County of Residence*

Table 1 shows a total of 19,858 adults suffering from chronic disability in January, 1944.[1] The distribution of these cases by county of present residence indicates some disproportion between the county population and number of chronically ill residents found in the study. For example, Hartford County has 27% of the state population, but only 24% of the chronically ill, while New London County has considerably more than its share.

Table I shows only those specific illnesses, within each major group of disorders, which account for at least 1% of the total number of cases. Although heart disease accounts for the largest number of cases, with about 16% of the total group of chronically ill, it is really a much more frequent disorder than is shown in Table I, as it is associated with such diagnoses as cerebral hemorrhage, or shock, paralysis and kidney disease.[2] Arthritis and rheumatism are next in order, with blindness a fairly close third.

It is apparent that heart disease is a much more prominent cause of disability in some counties than in others; e.g., it accounts for 17% of the total number of cases in New Haven County, but for only 11% in Tolland County. It may be of interest to note that the four most highly industrialized and urban counties show about 16% of all cases to be specifically heart disease, while, in the more rural counties of Litchfield, Middlesex, Tolland and Windham, heart disease accounts for only 12.5%. Arthritis and rheumatism account for over 10% of the total in the shore counties, but for only 8.2% in the four inland counties. As for frequency in the population, New London County has 22 cases of heart disease per 10,000, while Tolland County has only 13. New London County has 16

[1] It must be remembered that residents of institutions for the mentally ill, mentally defective, blind, deaf and tubercular are not included in this study.

[2] Stieglitz, Edward J., Geriatric Medicine, 1943.
W. B. Saunders Company, Philadelphia, pp. 281 ff., 658.
Thewlis, M.W., The Care of the Aged, 1942.
C. V. Mosby Company, St. Louis, ch. XXV and XXVII.

Table I

Adult Agencies

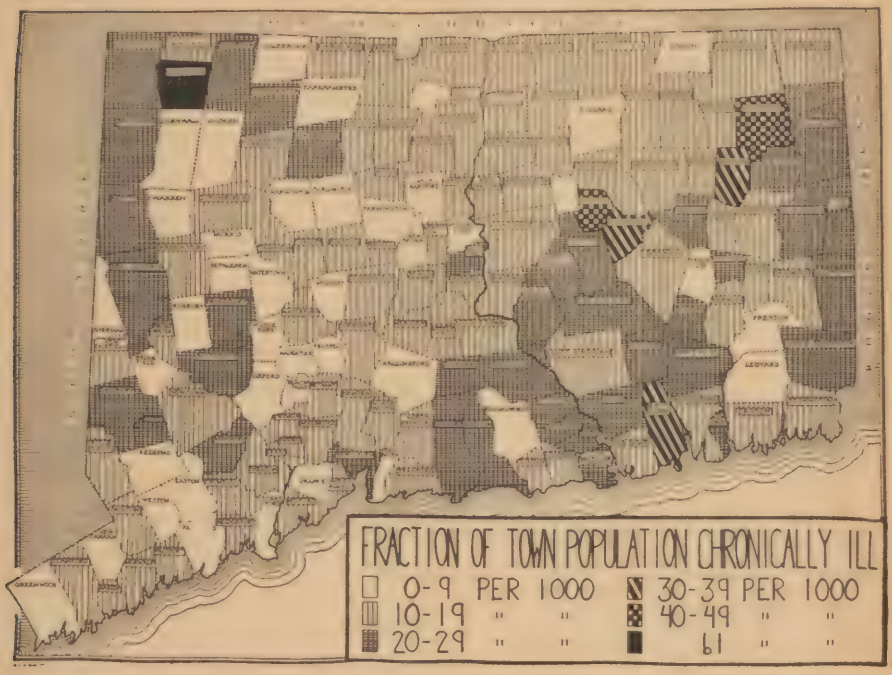
Distribution of Chief Illnesses By Counties

(Complete Study Condensed)

	Fairfield	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*	*Group Total*
Epidemic and Communicable	91	81	34	8	171	26	5	11	....	427
Poliomyelitis	48	21	25	3	90	13	2	6	208	....
Rheumatism, Nutritional and General Diseases	801	614	126	91	852	300	63	128	....	2,975
Rheumatism and arthritis	521	379	73	62	528	205	36	92	1,896	....
Diabetes	154	124	27	24	226	71	15	24	665	....
Diseases of Heart, Circulation and Blood	1,098	1,217	192	145	1,296	473	69	227	....	4,717
Diseases of heart	713	749	130	80	949	279	43	149	3,092	....
Arteriosclerosis	47	100	17	8	84	37	9	10	312	....
Anemia	57	93	8	11	49	25	6	11	260	....
Diseases of Nervous System and Sense Organs	1,276	1,580	306	217	1,709	536	138	317	....	6,079
Apoplexy, hemorrhage and shock	69	70	10	16	144	44	8	20	381	....
Paralysis	286	221	48	41	270	71	27	38	1,002	....
Blindness	422	530	102	53	413	159	34	113	1,826	....
Diseases of eye or ear	278	504	84	58	424	101	39	74	1,562	....
Diseases of Respiratory System (non-tuberculous)	106	102	17	11	83	33	6	27	....	385
Asthma	58	65	11	5	62	27	2	20	250	....
Diseases of Digestive System	232	182	42	27	363	102	27	81	....	1,056
Hernia	119	59	12	9	199	32	9	32	471	....
Diseases of Genito-Urinary System (non-venereal)	126	114	28	24	154	63	9	42	....	560
Diseases of Skin, Bones and Muscles	72	71	19	11	83	37	3	12	....	308
Deformities, Malformations and Results of Accidents	275	178	79	27	284	100	24	62	....	1,029
Amputated limbs	99	72	13	15	101	74	12	30	416	....
Deforming accidents (non-industrial)	62	38	27	10	81	22	3	19	262	....
Old Age and Senile Deterioration	343	305	74	51	263	172	25	87	....	1,320
Feebleness due to age	213	183	58	35	180	137	20	78	904	....
Senile dementia	130	122	16	16	83	35	5	9	416	....
Cancer and Other Tumors	104	104	23	19	166	35	4	22	....	477
Malignant tumors	94	92	15	13	138	28	3	22	405	....
Ill-defined and Other Diseases	70	188	52	29	94	55	14	23	....	525
Total	4,594	4,736	992	660	5,518	1,932	387	1,039		19,858
No. per 1,000 persons in population aged 21 yrs. and over (1940)	16	16	17	17	17	23	18	28		17
Percentage of Total Cases	23	24	5	3	28	10	2	5		100
Percentage of State Population	24	27	5	3	29	7	2	3		100

cases of arthritis and rheumatism to Hartford's and Litchfield's eight each. Figure 4 indicates the distribution of these chronically ill persons by town of residence.

FIGURE 4.



B. *Secondary Illnesses*

At least 58% of all cases have two or more handicapping chronic illnesses. Only the two chief illnesses were tabulated. One may say that there are over 31,300 chronic disorders among the 19,858 persons, or 158 illnesses per 100 people in the adult study. The most frequent secondary illness is seen to be diseases of eyes and ears, most of which are serious defects of vision. Table II shows the state-wide distribution of secondary disorders.

TABLE II

SECONDARY CHRONIC ILLNESSES

(Condensed)

ADULT AGENCIES

	Total	Group Total
Epidemic & Communicable.		138
Venereal diseases	118	
Rheumatism, Nutritional and General Diseases		1,680
Rheumatism & arthritis .	963	
Diabetes	288	
Chronic alcoholism	238	
Diseases of Heart, Circulation & Blood		2,476
Diseases of heart	644	
Arteriosclerosis	418	
Anemia	153	
Varicose veins	227	
Diseases of Nervous System and Sense Organs		2,230
Apoplexy, hemorrhage, shock	163	
Paralysis	123	
Mental deficiency	168	
Diseases of eye or ear...	1,285	
Diseases of Respiratory System (non-tuberculous) .		
Asthma	211	
Diseases of Digestive System		983
Diseases of gall bladder .	263	
Hernia	342	
Diseases of Genito-Urinary System (non-venereal)		639
Kidney diseases other than nephritis	258	
Diseases of Skin, Bones and Muscles		290
Deformities, Malformations and Results of Accidents		565
Orthopedic disorders (non-poliomyelitic) ...	202	
Old Age & Senile Deterioration		1,254
Feebleness due to age ...	1,042	
Senile dementia	212	
Cancer & Other Tumors...		151
Ill-defined & Other Diseases		591
Unknown		8,396
Total		19,858

C. *Age Distribution of Chronically Ill Patients*

Table III shows that half of the patients are seventy-two years of age or older.[1] Seventy-five per cent are aged 65 or more, 17% are in the middle-aged group from 40 to 64 years and 8% are in the young group under 40 years of age. The 502 patients under age 20 are included in this table because statistical tabulations were done by agency groups rather than by age. Although the agencies handled mainly adult cases, there were records on these young persons who were ill and incapacitated. The differences in median age between different illness groups are small, with one exception. The patients handicapped by epidemic and communicable diseases were pretty largely persons who were crippled as a result of infantile paralysis. Among the older people this basic disease or cause of crippling is often unknown or unrecorded, which results in their being included in the group of deformities and orthopedic disorders.

[1] Seventy-two years is the median age. The median is the middle point, or the figure which separates one half of the group from the other. Throughout this report, medians are used rather than averages because they give a much more accurate description of the actual data.

Table III

Chief Illness In Relation To Age

Adult Group

Chief Illness — *Age:*	*Unknown*	*75+*	*70–74*	*65–69*	*60–64*	*50–59*	*40–49*	*30–39*	*20–29*	*10–19*	*0–9*	*Total*	*Median Age*
Epidemic and Communicable	7	29	32	41	30	55	37	65	55	49	27	427	44
Rheumatism, Nutritional and General Diseases	23	1,067	768	554	175	224	86	49	15	11	3	2,975	72
Diseases of Heart, Circulation and Blood	60	1,883	1,313	830	211	198	82	35	21	51	33	4,717	73
Diseases of Nervous System and Sense Organs	78	1,903	1,024	739	453	752	403	284	231	137	75	6,079	69
Diseases of Respiratory System (non-tuberculous)	5	105	101	71	22	23	22	15	3	14	4	385	70
Diseases of Digestive System	12	414	318	171	34	43	26	20	10	3	5	1,056	73
Diseases of Genito-Urinary System (non-venereal)	6	228	154	111	16	21	6	2	4	8	4	560	73
Diseases of Skin, Bones and Muscles	11	113	75	37	14	21	12	5	9	10	1	308	72
Deformities, Malformations and Results of Accidents	27	303	230	181	66	92	40	20	10	27	33	1,029	70
Old Age and Senile Deterioration	18	880	237	131	31	18	5	..	..	..	..	1,320	75+
Cancer and Other Tumors	12	145	99	68	42	70	24	13	2	..	2	477	70
Ill-defined and Other Diseases	18	185	137	96	23	33	16	10	2	2	3	525	72
Total	277	7,255	4,488	3,030	1,117	1,550	759	518	362	312	190	19,858	72
Percentage of Cases		37	23	15	6	8	4	3	2	2	1	100%	

D. *Sex and Marital Status of Chronically Ill Patients*

Slightly over 55% of the patients were women. The exact numbers of patients in each sex and marital status group are given in Table IV. The original coding of marital status distinguished between those who were widowed, separated and divorced, but these three categories are combined in Table IV. Of these three categories, the largest is made up of widowed persons.

Among the men, 28% are single, 37% are married, while 35% are separated, divorced or widowed. Among the women, 21% are single, 24% are married and 55% are separated, divorced or widowed.

Although women constitute 55% of the whole group, they make up only 43% of the single persons, and 39% of the married persons. They constitute 61% of the separated, divorced or widowed persons. These last three percentages are calculated on the basis of an equal number of men and women. Although there seems to be a significant tendency for fewer of the chronically ill women to be married, and for more of them to be separated, divorced or widowed, than is true of the men, there is no reasonable basis for assuming a causal relationship between marital status and chronic illness.

E. Amount of Public Assistance Received by the Chronically Ill

Table V shows that half of the patients receive over $8.10 per week in public assistance. Tabulations were made of assistance from private agencies and individuals, but these data are neither complete nor reliable enough for inclusion here. It is not known how many of the group of 4,157, who had "unknown" amount of public assistance, are receiving it or in what amounts, although it should be assumed that they are distributed in the same way as the rest of the total group. This would mean that about 18,320 of these patients are getting public assistance. 940 of them, or almost 7%, were receiving over $12.00 per week. Since January, 1944, there has been an increase in allotments by the Commissioner of Welfare to those people who need medical attention so that the figure shown in Table V would have to be revised upward at the present time.

It is noteworthy that those suffering from cancers or tumors were receiving the largest amounts, with a median of $9.00 per week, while those incapacitated by old age or senile deterioration were receiving the lowest amounts, or $7.70 per week.

F. *Patients Confined to Bed or Wheelchair*

The purpose of this study was to investigate the need for state infirmaries or hospitals for the chronically ill. It is a generally accepted policy that only those patients actually in need of institutional care, for the sake of themselves or the community, should be cared for in hospitals or infirmaries. Of all chronically ill patients, those confined to bed or wheelchair are most likely to need institutional medical and nursing care. Table VI shows the physical status of the patients found in the different agencies. Approximately 11% of the total group, or 1899 patients, are

Table IV

Chief Illness By Sex and Marital Status

Adult Group

Chief Illness	Men Marital Status ?	S.	M.	D.S.[1] & W.	Total	Women Marital Status ?	S.	M.	D.S.[1] & W.	Total	Total Marital Status ?	S.	M.	D.S.[1] & W.	Total
Epidemic and Communicable	11	120	80	45	256	2	71	43	52	168	16[2]	191	123	97	427
Rheumatism, Nutritional and General Diseases	39	313	380	468	1,200	31	246	442	1,041	1,760	86[2]	559	822	1,509	2,976
Diseases of Heart, Circulation and Blood	54	367	750	678	1,849	64	380	654	1,735	2,833	154[2]	747	1,404	2,413	4,718
Diseases of Nervous System and Sense Organs	93	844	961	653	2,551	57	1,019	849	1,570	3,495	182[2]	1,863	1,810	2,223	6,078
Diseases of Respiratory System (non-tuberculous)	3	46	100	57	206	8	33	47	85	173	17[2]	79	147	142	385
Diseases of Digestive System	14	142	235	251	642	7	61	121	221	410	25[2]	203	356	472	1,056
Diseases of Genito-Urinary System (non-venereal)	13	61	106	98	278	9	45	77	146	277	27[2]	106	183	244	560
Diseases of Skin, Bones and Muscles	7	58	35	62	162	2	33	32	78	145	10[2]	91	67	140	308
Deformities, Malformations and Results of Accidents	19	192	155	212	578	15	152	72	202	441	44[2]	344	227	414	1,029
Old Age and Senile Deterioration	37	165	142	301	645	28	103	83	452	666	74[2]	268	225	753	1,320
Cancer and Other Tumors	12	41	107	66	226	4	39	88	115	246	20[2]	80	195	181	476
Ill-defined and Other Diseases	4	50	64	81	199	7	54	86	176	323	14[2]	104	150	257	525
Total	306	2,399	3,115	2,972	8,792	234	2,236	2,594	5,873	10,937	669	4,635	5,709	8,845	19,858

[1] Divorced, Separated and Widowed.
[2] Includes cases of unknown sex.

Table V

Distribution of Chief Illness By Amount of Public Assistance

Adult Group

Chief Illness	*Unknown*	*None*	*$ .01 2.99*	*$3.00–5.99*	*$6.00–8.99*	*$9.00–11.99*	*$12.00–14.99*	*$15.00–17.99*	*$18.00–20.99*	*$21.00–23.99*	*$24.00+*	*Total*	*Median Amt. Per Week*
Epidemic and Communicable	138	96	16	46	60	50	4	..	9	4	4	427	$7.90
Rheumatism, Nutritional and General Diseases	259	130	100	159	1,052	866	33	19	30	15	12	2,975	8.00
Diseases of Heart, Circulation and Blood	486	270	133	647	1,571	1,391	78	34	45	38	23	4,716	8.30
Diseases of Nervous System and Sense Organs	2,512	333	128	593	1,252	967	59	52	54	57	72	6,079	8.10
Diseases of Respiratory System (non-tuberculous)	64	27	7	60	116	102	4	..	1	3	1	385	8.10
Diseases of Digestive System	68	38	26	164	388	350	11	7	2	1	1	1,056	8.20
Diseases of Genito-Urinary System (non-venereal)	48	27	11	95	213	146	11	2	..	2	5	560	7.90
Diseases of Skin, Bones and Muscles	48	23	10	42	102	55	20	1	2	4	1	308	8.00
Deformities, Malformations and Results of Accidents	161	80	42	138	302	228	14	10	20	6	29	1,030	8.10
Old Age and Senile Deterioration	162	92	51	234	443	254	17	18	18	13	18	1,320	7.70
Cancer and Other Tumors	169	67	7	43	70	86	8	5	3	3	16	477	9.00
Ill-defined and Other Diseases ..	42	35	25	68	192	142	7	5	6	1	2	525	8.10
Total	4,157	1,218	556	2,589	5,761	4,637	266	153	190	147	184	19,858	$8.10

known to be bedridden or confined to wheelchair.[1] It seems logical to assume that about 11% of those whose physical status is unkown would also be bedridden. On this assumption, the bedridden group probably totals 2,184, rather than 1,899.

Table VII shows the chief illness group and county of residence of this most severely disabled group. In order of greatest frequency, these confined patients are suffering from paralysis, heart disease, arthritis, cancer and senile dementia. Relative to population, such patients are more frequent in Windham and New London Counties where they include 6% and 10%, respectively, of all cases.

Table VIII shows the type of present residence of the bedridden group by counties. It is significant that 60% are living away from their own homes. Many of those living with their families are with children or grandchildren rather than in their real homes.

Table IX shows that 77% of this group were receiving public assistance in varying amounts. Half of those receiving such assistance were receiving over $10.11 per week. Because of the large number of cases (468) in which it could not be determined whether or not public assistance was received, it is impossible to be specific about actual total numbers. However, it seems reasonable to estimate that this group is divided in the same proportion as the others, which would indicate a total of 1,462 receiving assistance. Fifty-eight per cent are now getting a certain amount of medical care, although it may not be assumed to be adequate in all cases. According to the records analyzed, 11% get neither nursing nor medical care.

The median age of this group is 71 years; 65% are over 65 years of age, while 9% are under 40. Women constitute 60% of this group.

For tabular information on the above topics, see appendix II, D, page 81.

G. *Partially Ambulatory Patients*

By definition in this study, a person was called partially ambulatory if he needed crutches or a cane in walking, or was so disabled that he was confined indoors.

Table X shows the size of this partially ambulatory group, a total of 5,691, their chief illnesses and their county of residence. Their most frequent chief illnesses are diseases of heart, arthritis or rheumatism, paralysis and complete or partial blindness. Fairfield County has a fairly small proportion of these cases, while New Haven and New London Counties have more than would be expected for the size of their populations.

Table XI shows that 33% of the group of partially ambulatory patients are living away from their own homes or families, and that the largest single group of these are in rooming or boarding houses.

[1] Since most of these are bedridden, and since those confined to wheelchair require about the same amount of attention, they are all treated under one category as "Bedridden" in the tables presented.

Table VI

Present Condition of Chronically Ill Patients By Adult Agencies

Statewide

	Old Age Assistance		*Towns*		*Town Farms*		*Aid to The Blind*		*Education of The Blind*		*Private*		*Other*	*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*No.*	*%*
Unknown	1,698	..	261	..	106	..	6	..	470	..	126	..		2,667	
Bedridden	733	8	291	12	128	11	2	1	5	..	739	28	1	1,899	11
Partially Ambulatory	2,714	29	641	26	365	31	111	74	1,149	72	709	27	2	5,691	33
Ambulatory	5,684	63	1,554	62	692	58	37	25	451	28	1,152	45	31	9,601	56
Total	10,829		2,747		1,291		156		2,075		2,726		34	19,858	100

Table VII

Groups of Illnesses of Bedridden Patients
By County of Residence

Adult Agencies

Chief Illness	*Fairfield*	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*
Epidemic and Communicable	15	13	2	2	18	5	1	4	60
Rheumatism, Nutritional and General Diseases	54	47	7	5	65	19	2	14	213
Diseases of Heart, Circulation and Blood	84	73	11	8	101	30	3	23	333
Diseases of Nervous System and Sense Organs	177	155	22	18	214	64	8	49	707
Diseases of Respiratory System (non-tuberculous)	5	4	1	..	6	2	..	1	19
Diseases of Digestive System	7	6	1	1	8	2	..	1	26
Diseases of Genito-Urinary System (non-venereal)	10	8	1	1	12	4	1	2	39
Diseases of Skin, Bones and Muscles	8	7	1	1	10	3	1	2	33
Deformities, Malformations and Results of Accidents	51	44	7	5	61	18	2	14	202
Old Age and Senile Deterioration	35	31	4	4	41	13	1	10	139
Cancer and Other Tumors	30	26	4	3	36	11	1	7	118
Ill-defined and Other Diseases	2	3	..	..	3	1	..	1	10
Total	478	417	61	48	575	172	20	128	1,899
Percentage of Bedridden	25	22	3	3	30	9	1	6	100%
Percentage of State Population over 20 yrs. of age	25	26	5	3	28	7	2	3	100%

Table VIII

Present Residence of Bedridden Patients By County

Adult Agencies

	Fairfield	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*	*Percentage*
Unknown	101	88	13	9	121	36	4	27	399	
Living Alone	8	7	1	1	10	3		2	32	2
Own Family	144	125	18	15	173	52	6	38	571	38
Rooming or Boarding House	37	32	5	4	43	13	2	10	146	10
Convalescent Home .	95	84	12	10	116	35	4	26	382	26
General Hospital ...	43	37	6	4	52	15	2	12	171	11
Other	50	44	6	5	60	18	2	13	198	13
Total	478	417	61	48	575	172	20	128	1899	100%

Table IX

Bedridden Patients

Amount of Public Assistance By County of Residence

Adult Agencies

(Median amount is $10.11 per week)

	Fairfield	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*	*Percentage*
Unknown	117	103	15	12	142	42	5	32	468	
None	84	74	11	8	101	30	3	22	333	23
$.01 to $5.99	43	36	5	4	50	15	2	11	166	12
$6.00 to $11.99	140	123	18	15	169	51	6	38	560	39
$12.00 to $17.99	22	20	3	2	28	9	1	7	92	6
$18.00 to $23.99	44	37	5	4	51	15	2	11	169	12
$24.00 and over	28	24	4	3	34	10	1	7	111	8
Total	478	417	61	48	575	172	20	128	1899	100%

Table X

Groups of Chief Illnesses of Partially Ambulatory Patients
By County of Residence

Adult Agencies

Chief Illness	*Fairfield*	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*
Epidemic and Communicable	22	25	6	4	36	9	3	3	108
Rheumatism, Nutritional and General Diseases	166	185	47	26	269	63	18	25	799
Diseases of Heart, Circulation and Blood	217	241	61	34	352	82	24	33	1,044
Diseases of Nervous System and Sense Organs	489	544	138	77	794	185	53	75	2,355
Diseases of Respiratory System (non-tuberculous)	8	9	2	1	14	3	1	1	39
Diseases of Digestive System	30	34	9	5	49	12	3	5	147
Diseases of Genito-Urinary System (non-venereal)	25	27	7	4	39	9	3	4	118
Diseases of Skin, Bones and Muscles	20	22	6	3	33	8	2	3	97
Deformities, Malformations and Results of Accidents	102	113	29	16	165	38	11	16	490
Old Age and Senile Deterioration	73	81	20	12	118	27	8	11	350
Cancer and Other Tumors	22	24	6	4	35	8	2	3	104
Ill-defined and Other Diseases	8	10	2	1	14	3	1	1	40
Total	1,182	1,315	333	187	1,918	447	129	180	5,691

Table XI

Present Residence of Partially Ambulatory Patients By County

Adult Agencies

	Fairfield	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*	*Percentage*
Unknown	255	284	72	39	415	97	28	39	1229	
Alone	127	141	36	21	205	48	14	19	611	14
Own Family	487	542	137	77	793	184	53	74	2347	53
Rooming or Boarding	162	181	46	26	263	61	18	25	782	17
Convalescent Home .	48	53	13	8	77	18	5	7	229	5
General Hospital	7	8	2	1	10	3	1	1	33	1
Other	96	106	27	15	155	36	10	15	460	10
Total	1182	1315	333	187	1918	447	129	180	5691	100%

Table XII

Partially Ambulatory Patients
Amount of Public Assistance By County of Residence

Adult Agencies

(Median amount is $7.86 per week)

	Fairfield	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Total*	*Percentage*
Unknown	332	370	93	52	539	127	36	50	1599	
None	64	71	18	10	104	24	7	10	308	8
$.01 to $5.99	195	217	55	31	318	73	21	30	940	23
$6.00 to $11.99	544	605	153	86	880	206	59	82	2615	63
$12.00 to $17.99	24	27	7	4	39	8	3	4	116	3
$18.00 to $23.99	17	19	5	3	28	6	2	3	83	2
$24.00 and over	6	6	2	1	10	3	1	1	30	1
Total	1182	1315	333	187	1918	447	129	180	5691	100%

The amount of public assistance per person is considerably less for this group than for the bedridden patients, as shown by Table XII. Ninety-two per cent of of the group, or 5,263 persons, were apparently receiving public assistance. About half of the group were getting some medical attention, but a third were getting neither medical nor nursing care.

As a group, the partially ambulatory patients are younger by about four years than the bedridden group, as their median age is 67 years. Only 52% of this group are women.

H. *The Ambulatory Chronically Ill*

Fifty-six per cent—9,601 plus a proportion of the unknown cases—were found to be ambulatory, as shown by Table VI. Their chief illnesses are similar to those of the partially ambulatory in relative frequency of cases, with heart and rheumatic disorders leading in seriousness. See Table XIII. As a group, they are between the partially ambulatory and bedridden in age, with a median age of 69 years.

TABLE XIII

GROUPS OF CHIEF ILLNESSES OF AMBULATORY PATIENTS

ADULT AGENCIES

Chief Illnesses	*Number*	*Percentage*
Epidemic and Communicable	193	2
Rheumatism, Nutritional and General Diseases	1,536	16
Diseases of Heart, Circulation and Blood	2,592	27
Diseases of Nervous System and Sense Organs	2,401	25
Diseases of Respiratory System (non-tuberculous)	286	3
Diseases of Digestive System	673	7
Diseases of Genito-Urinary System (non-venereal)	289	3
Diseases of Skin, Bones and Muscles	190	2
Deformities, Malformations and Results of Accidents	287	3
Old Age and Senile Deterioration	672	7
Cancer and Other Tumors	192	2
Ill-defined and Other Diseases	290	3
Total	9,601	100

Since the disorders in this group are similar to those of the partially ambulatory patients, it may be presumed that many of them will fall into the partially ambulatory and bedridden classifications, with passage of time. Of all the sufferers from heart and rheumatic disorders, these ambulatory patients are probably the most robust and have "stayed on their feet" longer. Unless their disorders are eased, however, they will eventually lose their power to walk and take care of themselves.

Only 35% of this group live away from their own homes or families. Women constitute 53% of the ambulatory group. Ninety-two per cent of this group are receiving public assistance in a median amount of $7.50 per week. About half appear to receive some medical care. The problem of medical care for this group is discussed later in this report, page 37.

I. The Proportion of Chronically Ill Among Different Agency Groups Studied

1. *Old Age Assistance*

Among the 14,500 persons receiving Old Age Assistance in January, 1944, 10,829 appeared from their records to be disabled by chronic illness or physical deterioration due to advanced age. This is 75% of the group. Their five most frequent chief illnesses are heart disease, arthritis or rheumatism, diseases of eye or ear, paralysis and hernia (see Figure 5).

FIGURE 5.

Half of them are over 75 years of age; 57% are women and 27% are not living at home or with members of their families. One-fifth of them are living in rooming or boarding houses and 5% are cared for in private chronic and convalescent hospitals. Only 8% are confined to bed or wheelchair, in contrast with the 11% in this category for all agencies, while 30% are partially ambulatory.

The amount of public assistance given these patients varied from a few dollars per month to over $25.00 per week. Half of them received over $8.40 per week. The payments varied, naturally, with the seriousness of a patient's illness, e.g., the median assistance per week for the 3,339 suffering from diseases of heart or circulation was $11.50, while that of the 430 patients with diseases of genito-urinary system was $8.00 per week.

Further evidence that Old Age Assistance needs vary with physical condition is given by the comparison of the assistance to the chronically ill with the average for all Old Age Assistance recipients. Approximately $480,000. was allotted to all recipients in January, 1944, which means an average per week per person of $7.75. Since this figure includes all the chronically ill, it is obvious that the other 25% of the Old Age Assistance recipients received considerably less than $7.75 per week. In many cases, it must be remembered, Old Age Assistance merely supplements other financial resources of the client.

The problem of withholding Old Age Assistance payments from those who enter institutions is a complex but important one. Any change in the law regarding these payments, or in the definition of what constitutes an "institution", probably would result in substantial changes in such payments and in the residence of the beneficiaries. A strong impression gained in the study is that a large number of persons leave "institutions" upon acceptance as Old Age Assistance beneficiaries. It is not known whether this move away from institutions reflected:

(1) the possibility of the recipient's living upon his payment, or

(2) that the payment was sufficient supplement to other resources to permit maintenance outside an institution, or

(3) dissatisfaction with institutional life.

In interviews with town selectmen and welfare officials, the impression gained was that the prohibition of Old Age Assistance payments to persons when institutionalized is unreasonable and sometimes injurious, as better care might be given in the institution than the patient gets outside.

2. *Town Assistance Beneficiaries*

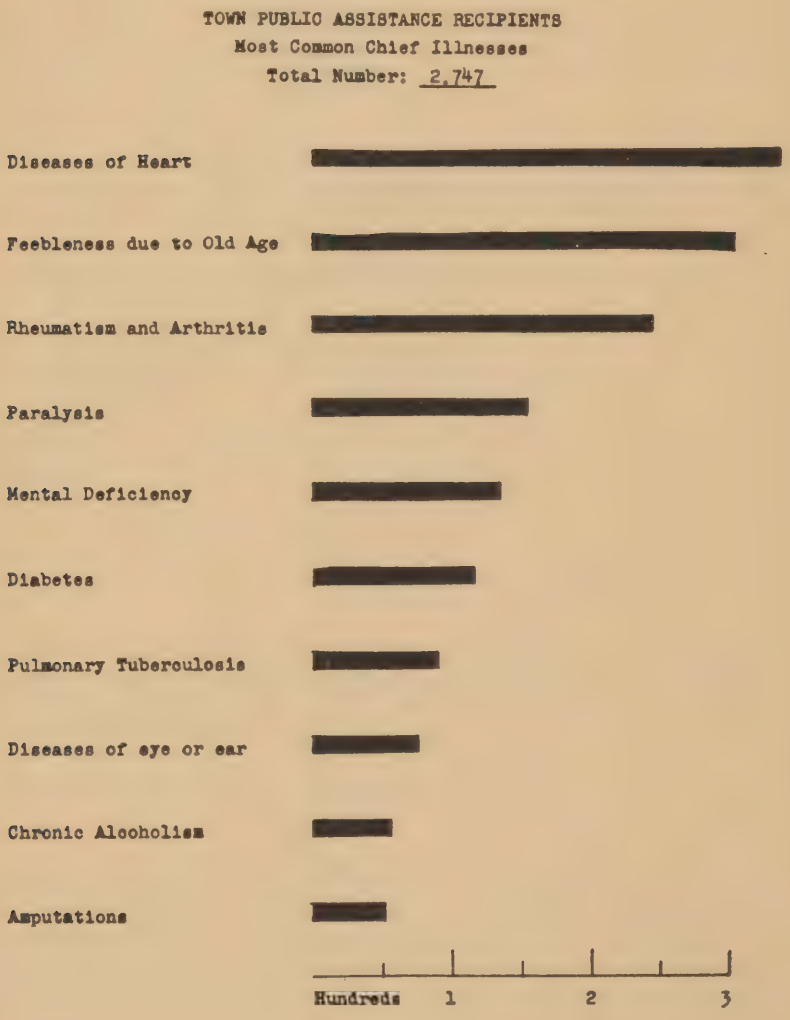
a. *General Relief*

One hundred and thirty-two towns reported 5,051 town relief recipients for January, 1944. Thirty-seven towns had no cases or did not report. It is probable that 5,100 is a good estimate of the total number of such persons. The number of town aid recipients varied from none to 668 per town, with a median number of approximately 12 per town.

According to the town records analyzed, 2,747 persons are chronically ill or disabled. This number is 54% of the total number of beneficiaries. (See Sources of Error and Limitations, appendix II, A, page 77.)

The chief illnesses among this group are somewhat different from those afflicting the Old Age Assistance patients. Heart diseases are most frequent and are followed by feebleness due to old age, arthritis or rheumatism, paralysis and mental deficiency. Chronic alcoholism is in ninth place among the chief illnesses, with 57 cases, but accounts for a larger number, 64, of secondary illnesses (see Figure 6).

FIGURE 6.



Town aid recipients who are chronically ill have a median age of 62 years. Those with chronic illnesses that were originally epidemic and communicable, such as tuberculosis, venereal disease and infantile paralysis, are relatively young, with a median age of 43 years.

Women make up 52% of the chronically ill town cases. Unmarried persons constitute 24% of the women and 36% of the men. 52% of the women recipients are divorced, separated or widowed, while only 25% of the men fall into this category.

A large proportion of the town cases, 16%, are living alone, while 38% are living away from their own homes or families. Twelve per cent, or 291 persons, are confined to bed or wheelchair, while 26% are partially ambulatory.

Chronically ill recipients of town aid receive a median amount of $6.40 per week. About 40% of these chronically ill town cases are supported indirectly by the state through reimbursement to the town.

Further information is given in appendix II, D, page 81.

b. *Town Home or Farm Residents*

The total population of these 39 institutions during January, 1944, was between 1,550 and 1,600 persons. It is impossible to give an exact number because of the lack of records.[1] Available evidence, however, indicates that over 82% were chronically ill, as disability records were made of 1291 persons.

Heart disease is again the most frequent of the chief illnesses. It is followed, in order of greatest frequency, by chronic alcoholism, senile dementia, paralysis, mental deficiency and arthritis or rheumatism (see Figure 7).

The median age of town farm cases is 68 years, with 63% over 65 years of age. Almost two per cent are under 40 years of age. Only 25% of the town farm patients are women. Over a third of the women patients are unmarried, while 51% of the men are reported as single.

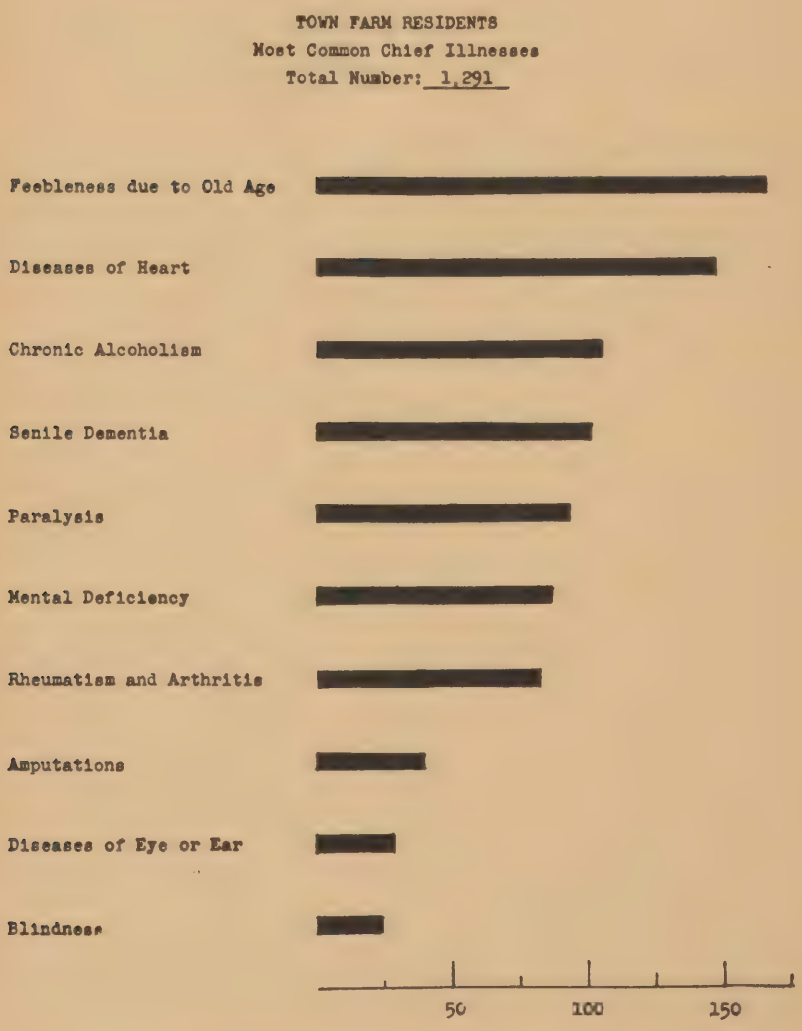
Ten per cent—128—of the town farm patients are confined to bed or wheelchair. The cost of support for two-fifths of these patients is transferred to the state through the practice of reimbursement for aliens.[2] The cost of town farm care appears from the records to average between $8.00 and $9.00 per week, but such operation costs are open to some question as accounting methods vary between towns and some facilities or services are not included as town farm expense. It is a general practice not to include capital costs. It is difficult, therefore, to appraise properly the real cost of town farms or town home care. The comprehensive study of town farm operation conducted by the Connecticut Public Expenditure Council during the summer of 1944 indicates an average net per capita cost of $9.87. The estimated gross cost, before deducting for farm income and residents'

[1] The census taken during the spring of 1944 showed 1,472 residents of the town farms. This figure represents the usual decrease in number in the spring when many residents leave the farms to seek employment or diversion elsewhere.

[2] During the month of December, 1943, over 40% of town farm residents were supported by the state, through reimbursement of the towns, according to reports to the Commissioner of Welfare.

payments, was $10.50 per week. It is impossible to appraise capital costs adequately or the costs of other services, such as administrative costs, which should be charged to the town farms. It is impossible to make a fair estimate of additional town farm costs. However, the writer would estimate that the figure of $9.87, quoted above, might well be raised about $3.00 for additional costs. This estimate is based partially upon the Connecticut Public Expenditure Council's finding of a total assessed value of town farm properties at $2,643,354.40.

FIGURE 7.



There is no evidence that any care other than room and board is given in the case of 23% of these patients and an additional 18% receive only personal or attendant care. Approximately half of the town farm patients receive some medical attention, but 93% of those who receive such attention are in the farms, municipal homes or hospital of only four counties, viz., Fairfield, Hartford, New Haven and New London. These four counties have 88% of all the town farm patients.

The proportion of present town farm patients that could or should be admitted to state chronic hospitals or infirmaries will be treated later in this report, page 53. See appendix II, D, page 81, for tabular data on town farm patients.

3. *Patients Receiving Care From the Board of Education of the Blind*

As of January, 1944, there were approximately 2,075 patients in the active files of this agency, who were not listed also in the Aid to the Blind or Old Age Assistance programs of the Public Assistance Division of the Office of the Commissioner of Welfare. They were all persons whose handicap had been measured by qualified professional personnel. A sample of 21% of the records of these patients was analyzed to make an estimate of the nature of their disorders.

With the advice and approval of the Executive Secretary of the Board of Education of the Blind, a distinction was made between those whose sight was so defective as to be of no use for practical purposes and those who might be called partially blind. While all had some visual defect, 29 patients had some disorder which seemed to be more serious or disabling than their partial blindness. Of the total of 2,075 chief disorders, 1,377 were totally blind, 669 were partially blind, 5 had serious heart disease, 5 had epilepsy, 9 were mentally deficient, 5 had other defects of the nervous system and 5 suffered from the results of birth injuries.

Forty-seven per cent of these patients were over 65 years of age, 37% were between 40 and 64 years, inclusive, and 16% were under 40 years of age. Sixty-five per cent of these patients were women. See appendix II, D, page 81, for further information on these patients.

4. *Aid to the Blind*

Analyses were made of all the 156 records in the files of the Bureau of Aid to the Blind in the Office of Commissioner of Welfare. Total blindness is the chief disorder of 123 persons. Of the others, partial blindness was found in 30 cases and diabetes, heart disease and functional nervous disorder in one case each. The median age of this group is 51 years which is partially due to the fact that persons are transferred to Old Age Assistance when they reach the age of 65. Fifty-three per cent of the group are women of whom 45% are unmarried. Fifty-three per cent of the men are unmarried.

5. *Connecticut Reformatory and State Farm for Women*

These two institutions reported 34 cases of chronic disorder among their charges, most frequent of which were venereal disease—8, heart disease—

4, and epilepsy—3. Chronic alcoholism among 6 patients is the most frequent secondary disorder.

6. *Reports from Private Agencies*

Requests were made of 298 private agencies for information on persons who were chronically ill and in their care in January, 1944. Replies were received from 216 agencies of which 136 gave reports of 2,726 chronically ill patients. Since many agencies did not report, it is certain that the reported 2,726 are not all the chronically ill known to private agencies. Table XIV, which is derived from the reports received, gives a minimum estimate that there are 340 more patients who might have been reported and included in the study. It is quite probable that there are really many more such chronically ill cases.

TABLE XIV

ESTIMATED NUMBER OF CHRONICALLY ILL PATIENTS

PRIVATE AGENCIES*

County	*Reported*		*Additional Estimates*		*Total*	
	Agencies	*Cases*	*Agencies*	*Cases*	*Agencies*	*Cases*
Fairfield	25	474	18	105	43	579
Hartford	28	910	14	85	42	995
Litchfield	10	82	6	35	16	117
Middlesex	9	92	5	20	14	112
New Haven	36	921	8	65	44	986
New London	12	154	1	6	13	160
Tolland	2	18	3	20	5	38
Windham	5	58	2	4	7	62
Total	127	2,726**	57	340	184	3,066
Number receiving Public Assistance	..	818	..	102	..	920

* The estimated number of agencies is based upon lists of known agencies which were solicited for information. The estimates of cases probably known to these agencies are based upon the actual numbers reported per agency and upon population.

** Includes 17 Connecticut residents temporarily out of the state.

The chief illnesses among these patients of private agencies are shown in Table XV and Figure 8. Heart disease again heads the list, followed in order by paralysis, cancer, arthritis or rheumatism, anemia and diabetes.

The median age of these patients of private agencies is 62 years. The median ages for the different major groups of diseases vary from 30 years for the 192 patients with epidemic and communicable diseases to 66 years for those 673 patients with diseases of the heart, circulation or blood, and to over 75 years for those (145) with senile deterioration. Forty-six per cent are over 65 years of age and 24% are under forty.

Women make up 62% of the total group. Single women constitute 34% of their sex while separated, divorced or widowed women make up 38%. Only 30% of the men are unmarried, while only 22% are separated, divorced or widowed.

Table XV

Private Cases

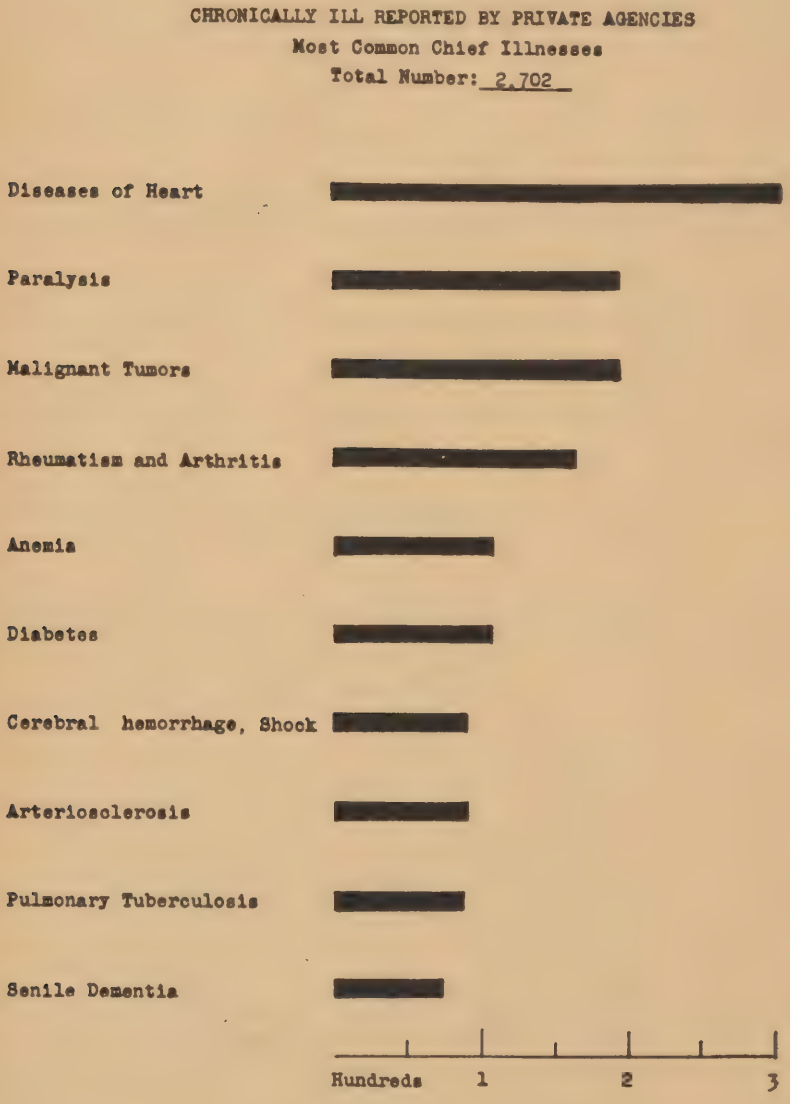
Distribution of Chief Illnesses By Counties

(Condensed)

	Fairfield	*Hartford*	*Litchfield*	*Middlesex*	*New Haven*	*New London*	*Tolland*	*Windham*	*Other*	*Total*	*Group Total*
Epidemic and Communicable	17	45	4	2	115	7	..	2	..	..	192
Pulmonary tuberculosis	12	19	..	2	49	5	..	..	..	87	..
Poliomyelitis (deformity and paralysis)	..	..	2	..	58	..	..	..	..	60	..
Rheumatism, Nutritional and General Diseases	54	99	9	13	101	18	2	7	..	..	303
Rheumatism and arthritis	25	62	7	8	48	13	1	3	..	167	..
Diabetes	24	25	2	5	43	5	1	4	..	109	..
Diseases of Heart, Circulation and Blood	131	234	10	17	215	40	4	17	5	..	673
Diseases of heart	73	72	3	6	127	16	1	8	3	309	..
Arteriosclerosis	17	47	1	..	26	2	..	..	1	94	..
Anemia	9	54	..	6	26	10	2	5	..	112	..
Diseases of Nervous System and Sense Organs	96	228	27	26	206	36	6	15	6	..	646
Apoplexy, hemorrhage and shock	5	23	2	..	57	7	..	2	..	96	..
Paralysis	44	66	13	11	36	13	3	10	2	198	..
Organic nervous disease	10	24	4	..	27	6	..	..	..	71	..
Neurasthenia and functional	..	24	..	4	13	..	2	..	1	44	..
Diseases of eye or ear	5	41	2	..	..	..	..	..	1	49	..
Diseases of Respiratory System (non-tuberculous)	13	41	1	1	18	3	..	1	..	..	78
Asthma	5	27	..	..	10	..	..	..	..	42	..
Diseases of Digestive System	25	26	3	3	28	2	..	2	1	..	90
Diseases of Genito-Urinary System (non-venereal)	11	13	1	3	25	7	1	2	..	..	63
Diseases of Skin, Bones and Muscles	8	14	2	4	29	3	1	..	..	..	61
Deformities, Malformations and Results of Accidents	33	48	11	10	78	12	3	1	5	..	201
Deforming accidents (non-industrial)	14	13	2	7	15	2	1	..	2	56	..
Old Age and Senile Deterioration	39	51	4	6	26	15	..	4	..	..	145
Senile dementia	29	15	3	3	18	5	..	2	..	75	..
Cancer and Other Tumors	44	66	8	7	75	9	1	6	..	..	216
Malignant tumors	39	60	7	6	70	8	1	6	..	197	..
Ill-defined and Other Diseases	3	45	2	..	5	2	..	1	..	..	58
Total	474	910	82	92	921	154	18	58	17		2,726
Percentage of Cases	17	34	3	3	34	6	1	2	..		100
Percentage of State Population	24	26	5	3	28	7	2	3	..		100

A large proportion of the private patients, 28%, are confined to bed or wheelchair. This confinement is much more common among those afflicted with deformities and malformations than among those with diseases of the digestive system, of whom 46% and 10% respectively are bedridden.

FIGURE 8.



Thirteen per cent of the group have some diagnosed mental abnormality and an additional 7% are suspected[1] of mental abnormality.

Although these persons are patients of private agencies, a large portion receive some public assistance. Thirty per cent are reported to receive state aid or aid from their town of residence. Seventy per cent, receive no public assistance, but many of these receive financial support from private agencies and persons.

An analysis of the previous occupations of the private patients shows that 38% were engaged in their own housework, 19% were industrial operatives or service workers, and 9% were domestic and unskilled workers. There is an indication that industrial and unskilled workers tend more to become chronically ill than do the other occupational groups in the population. According to the 1940 census, industrial and service workers[2] composed 35% of the employed population. However, they composed 43% of the previously employed patients of this study. Domestic and unskilled workers were 12.5% of the employed population, but totalled 19% of the formerly employed patients.

According to the reports from private agencies, 98% of their patients will continue to be disabled for over 10 years which, for all practical purposes, means for the rest of their lives. Tables in appendix II, D, page 81, give further detailed data on the above group.

J. *Number of Chronically Ill Who Are Dependent Upon Public Assistance*

The following Table, XVI, indicates that a very substantial porportion of the patients included in this study are now receiving some form of public assistance. Of roughly 20,000 persons who were found to be chronically ill, at least 18,000 are receiving public assistance in some amount.

TABLE XVI

PUBLIC ASSISTANCE RECIPIENTS

BY AGENCY

Agencies	*Number of Beneficiaries*	*Number Chronically Ill*	*Number Ill Getting Public Assistance*	*Median Amt. Per Week*
Old Age Assistance	14,500	10,829	10,829	$8.40
Town	5,051	2,747	2,747	6.40
Town Farms	1,551	1,291	1,291	8.50
Education of the Blind	2,075	2,075	?	?
Aid to the Blind	156	156	134	7.60
Miscellaneous Institutions	?	34	34	?
Private Agencies	?	2,726	818*	?

*These cases are not duplications of cases reported by public agencies. They appear to be persons whose public agency records did not reveal chronic illness. It may be assumed that about 200 of them are recipients of assistance from towns and that the remainder receive state assistance.

[1] A patient was coded "suspected" if the diagnosis of mental abnormality was made by a non-professional person.

[2] U. S. Department of Commerce, Bureau of the Census; Population, Second Series, Connecticut, 1941. U. S. Government Printing Office, Washington, D. C.

V. Discussion of Data

A. *Needed Provision for the Chronically Ill*

Although the first impression given by the foregoing data on the chronically ill is that hospitals and infirmaries are badly needed for their care, careful consideration should be given to all aspects of the problem and to the long range goals of government. It is practically axiomatic, of course, that every encouragement should be given to personal independence and self-support, rather than to social and economic dependency.

It should also be axiomatic that a healthy citizenry is necessary to achieve any goal of self-sufficiency. It is probably much nearer the truth that people become dependent through chronic physical and mental disorders than that they become ill as a result of economic dependency.

It would be possible for state institutions to be built to house and care for all dependent chronically ill, but a more acceptable social philosophy would hold that such institutions are really signs of failure to prevent the disorders that necessitated institutionalization. Therefore, consideration should be given to the questions of providing adequate medical care in the home, or home community, with the institution as the last resort or facility for such care as cannot be provided otherwise.

Such consideration of the problem suggests four levels of medical care for the chronically ill:

(1) home care by local physicians and public health nurses,
(2) out-patient clinic consultation and treatments for the ambulatory,
(3) long term infirmary care, and
(4) chronic disease hospital treatment.

All four levels should be integrated for most efficient operation and for the benefit of the patient.

1. *Care in the Home*

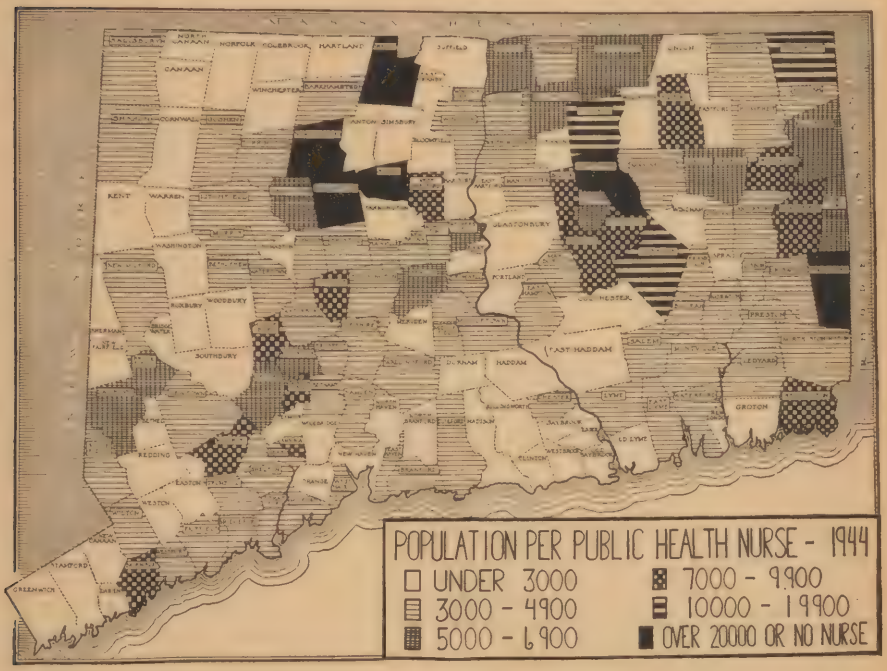
Home medical care should be provided to all, with periodic visits by the public health nurse, who should call the patient's physician when necessary and who should carry out the physician's instructions in caring for the patient. An additional responsibility of the nurse should be the instruction of other members of the household in home nursing care, the giving of baths, exercise, proper diets and so forth. This type of work is now being done by public health nurses.

A much needed service in the homes of many chronically ill patients could be performed by a corps of household aides. This corps could be composed of women in the community who would register with a supervisory agency and be available for housekeeping service in the homes of the needy patients. According to Tables VIII and XI there were 840 bedridden and partially ambulatory patients living alone. A household aide who would come in for a short time each day to cook, wash dishes and do other essential things would make it possible for many patients to remain at home rather than go to an infirmary.

It will be shown below, Section 3, page 39, that about 5,000 patients should be cared for in hospitals and infirmaries, leaving about 3,100 bed-

ridden and partially ambulatory patients in their own homes or with relatives. This would be the nucleus of the group to receive the type of care outlined above, although a large number of the ambulatory patients would also need occasional home care. Approximately 6,000 would be a fair estimate of those to receive home nursing and medical care. Such care for these patients would require fairly large additions to our present public health nursing staffs. Figure 9, indicates the approximate number

FIGURE 9.



of public health nurses available in our different towns. Table XVII indicates the additional nursing personnel that would be needed to carry on an adequate program of treatments of the home-bound chronically ill.

The training, qualifications and supervision of these nurses is of great importance, but is not greater than the need for the patients' local physician, who directs the nurses' work, to have frequent association with the nearest center of diagnosis and treatment of the chronically ill.

Visiting nurses' fees, like the fees for the patients' physicians, should follow a standard rate system and should be charged against the patients' public assistance benefits.

2. *Out-patient Clinics*

Both for economy of treatment and for proper care of the chronically ill who could not be cared for at home and do not need hospital or in-

TABLE XVII

PUBLIC HEALTH NURSING IN CONNECTICUT

PRESENT AND NEEDED NURSES BY COUNTY*

County	*Present Nurses*	*Needed Nurses*	*Total*
Fairfield	120	96	216
Hartford	139	93	232
Litchfield	30	19	49
Middlesex	16	12	28
New Haven	164	83	247
New London	33	30	63
Tolland	8	9	17
Windham	12	18	30

*** Within any given area it should be possible for two or more towns to combine for more efficient personnel and geographic administration of nursing services. This table is based upon the standard need for one public health nurse for each 2,000 persons. (Ref., National Organization for Public Health Nursing, 1790 Broadway, New York, N. Y.)**

firmary care, a system of out-patient clinics is needed. Such clinics would be more or less limited to ambulatory patients who could come periodically for consultation or treatment. Clinic treatments should be much less expensive in the time of physicians and nurses than home visits. Such a system should be operated by the commission or board in charge of the hospitals and infirmaries discussed below, as there would be a constant flow of patients among the three agencies. These clinics might be operated most effectively in connection with the 35 to 40 general hospitals in the state. They should be staffed with nurses, medical social workers and physicians drawn partly from the full-time staffs of the state hospitals for the chronically ill, discussed later, and partly from physicians of the community. This arrangement would provide most effectively for proper training and experience of both the institutional and local physicians. Local physicians should rotate on this service and should be paid an ample fee for time spent in clinic consultations. Patients' fees should be charged against the public assistance benefits for which the patient has been accepted, or be paid directly by the patient himself. Through contractual arrangement, the state program should pay the private hospital for clinic rental, for laboratory services and for such services of house physicians and nurses as may be necessary.

Through this system of out-patient clinics, the great majority of the ambulatory chronically ill should be treated and guided in proper health programs. In this way, many would be prevented from needing admission to infirmaries or hospitals and, for those who must be admitted, more complete illness histories would be available to institution physicians. It is not possible to say how many clinic visits would be necessary per month in any one town. The use of the clinics, and therefore their value to the state-wide program, would increase gradually with public familiarity and recognition of their great potential aid to the local physicians. Ambulatory patients who should visit such clinics will not go automatically when clinics are established. They will go largely because some educational work has been done with them by the social workers of the public assistance department or the public health nurses.

Possibly these clinics should be operated on a part-time basis at first, with extension of their hours as demand increases. If one may assume that the average ambulatory patient should visit the clinic once a month, there should be an average of about 80 patients per week at each of 35 clinics.

a. *Hospital Beds for Observation and Diagnosis*

A great need may be found soon, through the clinic service as well as the home medical care program, for hospital beds for patients who should be under observation for a few days to insure adequate diagnosis. Physicians are becoming more and more emphatic that proper and early diagnosis is essential to successful treatment. It must not be expected, therefore, that the patient's physician will be able to make satisfactory diagnosis in the home nor that it may be made during a visit to the out-patient clinic, even though there should be more diagnostic facilities at the clinic. In many cases, a short period of observation in the hospital will be necessary for accurate and timely diagnosis. This observation period might be spent in the same general hospital to which the out-patient clinic is attached. Accurate diagnosing, made possible by the above procedure, would result in early and more specific treatment, either in the patient's home by his private physician or elswhere, with much greater chance of his cure.

Even though expensive hospital beds may have to be used frequently for this observation period, a long-term reduction in costs of chronic infirmary and hospital care should result from early treatment and prevention of the inevitable chronic and incurable stage of disease.

3. *Infirmaries for the Chronically Ill*

For those patients who cannot be cared for in their own homes or in the out-patient clinics, a system of infirmaries is necessary to give long-term medical and nursing care. Such infirmaries should not be mere custodial institutions, or places for the aged to retire to spend their last unhappy years, but they should carry on active treatment programs consistent with their patients' needs and advanced medical practice. It is not true, as is so generally supposed, that nothing can be done to improve the condition of the chronically ill. Therefore, such infirmaries should have two goals: to give the best possible care to those who must remain in them, and to return as many as possible to their home communities and normal social life. These infirmaries will need staff physicians and well qualified professional nursing personnel. "Practical" or "vocational" nurses or trained attendants will not be sufficient.

The number of infirmary beds needed at present is determined chiefly by the number of bedridden and partially ambulatory patients who have already been separated from their own homes and families and are being cared for elsewhere. It was shown in Tables VIII and XI that 60% of the bedridden and 33% of the partially ambulatory are so situated. These together amount to 3,140 patients.

Many of the chronically ill and aged are now residents in the 215 chronic and convalescent hospitals licensed by the State Department of Health.

One hundred and thirteen of them reported 977 patients as of January, 1944. Approximately 470 of these were receiving public assistance. In August, 1944, the Office of Commissioner of Welfare was making payments for the support of 614 patients in 120 of these hospitals. An intensive study of a small number (38) of these private hospitals indicates that practically all of their residents are chronically ill. See appendix I, C, page 65.

They are all besieged by applicants for admission, many of whom are suffering from obvious chronic illness and very few of whom can be accommodated. The charges made by these hospitals vary from $15.00 to $60.00 per week (see appendix II, D, page 81). The state and towns are paying as much as $35.00 per week for many of these patients, but the average payment for public charges appears to be about $25.00 per week. These prices appear high in comparison to probable costs of care in state hospitals and infirmaries, but private operators generally make the emphatic statement that they do not receive enough for state or town supported cases. Some say that they would much prefer to take private patients who could afford more than public agencies pay, but that they have, so far, been willing to take such patients because of sympathy for them and because they wish to be cooperative with the public agencies. It appears that the present private homes and hospitals would suffer little or no deprivation if their publicly supported patients were cared for elsewhere. It is the writer's impression, from talking with operators of these hospitals, that at least twice as many persons would be cared for by them if they had room, staff and other facilities for their care. If infirmary care were available, it is certain that a large number of those now living alone or with relatives would demand admission. A fair estimate might be one-third of the bedridden and partially ambulatory patients so situated. This would amount to an additional 1,240 patients, according to Tables VIII and XI, or 4,380 altogether.

The 4,380 patients found in this study to be in need of infirmary care would not constitute the whole number that should be cared for in this way. Connecticut's mental hospitals have been faced for some time with the very serious problem of caring for hundreds of physically ill patients who do not need the type of psychiatric care given in mental hospitals. It is true that most of them are characterized by the disorientation, irritability and confusion so often found in aged people, but they come under the provisions of Connecticut's Sanitary Code Regulation No. 200-A of the State Department of Health, which would allow their care elsewhere. A careful case analysis of the patients at the Norwich State Hospital in February, 1944, revealed that 225 patients were eligible for removal under this regulation of the Sanitary Code. The other mental hospitals were not requested to make this painstaking study of their own populations, but it may be safely assumed that the situation at the Connecticut and Fairfield State Hospitals would be similar to that at Norwich. Thus there would be at least 620 such patients needing infirmary care. Their removal to infirmaries would materially lighten the burden of care now borne by the mental hospitals. The total would be approximately 5,000 candidates for infirmary or medical care. In Section 4, following, it will be shown that

approximately 1,000 of these patients will need hospital rather than infirmary care at any one time. Therefore, the estimated infirmary population is 4,000. A feasible number of such infirmaries might be five, located with proper regard to availability of consultant physicians from the surrounding community and centers of population. According to the findings of this study, appropriate locations would be in the regions of Bridgeport, New Haven, Waterbury, Hartford and Norwich. The latter one should accommodate 650 patients while the others should have 800 to 900 beds each.

a. *Infirmary Wards for Communicable Diseases*

As a number of the infirmary patients will have occasional communicable diseases, such as respiratory infections, proper care for them and protection of the other infirmary patients would require a small isolation ward at each infirmary where such infectious patients could be given care, rather than at the general hospital.

4. *Hospitals for Chronically Ill*

A certain number of the chronically ill need intensive nursing, medical and surgical care, such as can be given only in a properly equipped and staffed hospital. It is shown in Tables VIII and XI that approximately 268 of the bedridden and partially ambulatory patients of this study were patients of general hospitals. Another group of 786 bedridden and partially ambulatory patients, a large proportion of whom needed constant nursing and medical attention, were cared for in the private hospitals. It might be expected that many of the chronically ill patients of our general hospitals would seek care elsewhere as the authorities in charge of the general hospitals have made frequent statements as to their difficulty in caring for such patients. A large number of those patients now in the mental hospitals, but eligible for transfer, are also receiving intensive treatment in the institution medical and surgical wards. Their removal would help relieve the crowded condition of these hospitals.

On the basis of the above figures for patients in general and private hospitals, it seems quite safe to estimate that at least 1,000 patients would need chronic hospital treatment at any one time. They should be drawn mostly from the infirmaries and would, therefore, reduce infirmary populations almost an equal amount in spite of the shorter duration of hospital stay.

The location of such hospitals would be determined by proximity to a large medical center and to centers of population. One such hospital, with a capacity of 600 beds, should be located in or near New Haven, and the other, with a capacity of 400 beds, should be located near Hartford.

5. *Research and Training*

Of fundamental importance to the success of the plan outlined above for the care of the chronically ill is a well financed program of research on the causes and treatment of chronic illness and of the training of physicians, nurses and social workers in the use of the most advanced knowledge and practice. It is well known to all who have some acquaintance with

medical and public health problems that the modern physician can make excellent and effective use of the skills and knowledge given him by his science. Yet it is equally well known that medical research and medical science have been almost entirely limited, until recently, to the treatment of the various diseases and plagues that formerly took such a large toll of life, but which now are seldom encountered in our state. Medical authorities are now beginning to call attention to the fact that a great majority of medical practice is concerned with chronic disorders for the diagnosis and treatment of which many physicians have not had opportunity to gain adequate knowledge and training. The outstanding medical problems of today are presented by the chronic illnesses. In actual length of incapacity and suffering of the patient and in loss of productive capacity, these are far more serious than the acute illnesses.

Before significant progress can be made in preventing and treating the chronic illnesses, medical research must be stimulated and greatly broadened in this field. There are three ways to do it:

(1) create adequately paid positions for physicians in this branch of medicine
(2) establish research funds and grants to enable physicians and medical scientists to pursue such work, and
(3) create greater emphasis in our medical schools upon the teaching of chronic aspects of disease.

Through the whole program outlined above, the state can contribute to the first and second methods and proper encouragement should result in the third.

At least $100,000 should be devoted directly to research and training in these hospitals and infirmaries.

6. *Boarding Homes for the Aged*

It is difficult to make an accurate survey of the need for a state home for the aged who do not need medical or nursing care. Most members of such a group would come from the assistance rolls of Old Age Assistance, town welfare departments, town farms, Aid to the Blind, and private agencies. An estimate of the total number in such categories is 6,870, coming from the recipients of public assistance who were not found to be chronically ill: Old Age Assistance, 4,170; town relief, 2,500; town farm residents, 200, and an unknown number of those aided by private agencies.

In January, 1944, there were 101 private homes for the aged, licensed only by the Public Welfare Council. Eighty-seven of these homes reported 363 residents as of December 31, 1943. An unknown number of these persons are actually infirm or chronically ill.

The number of persons in real need of state homes at the present time is impossible to estimate with accuracy. Over a third of the chronically ill are now living away from their own homes or families and it might, therefore, be correct to estimate that at least a fourth, or 1,720 of the 6,870 supposedly well recipients of public assistance are also outside their own homes. Of this number, at least 1,000 would want admission to state homes. This number should be expected to increase considerably if family incomes were to decrease through a decline in production and employment.

The home for the normally healthy aged person should provide quarters for single persons and married couples, should allow for a certain amount of housekeeping and occupation by the aged residents, should have a recreational program, and an attendant nurse who could call a physician when necessary. This type of home, accommodating perhaps 200 residents, should be operated at a per capita cost of $10.00 per week. The net cost to the state would depend, of course, upon the portion paid by the residents and upon whether or not residence in such a home would bar a person from receiving Old Age Assistance benefits.

The smaller the dwelling unit the more home-like and desirable life might be made for aged residents, but the more expensive would be their maintenance. Five such homes, located in the population centers of areas to be served, would probably combine economy with satisfaction to residents.

According to the 1940 census, there were 128,554 Connecticut residents aged 65 or over. The provision of 1,000 beds would mean an average of one bed per 130 aged people on a state-wide basis. However, the need for such homes, from town to town, does not depend solely upon the number of aged, but also upon the financial status of the aged. Figure 10, showing the percentage of the aged of each town who received Old Age Assistance in January, 1944, is probably a safe guide to the need in

FIGURE 10.

different parts of the state. Accordingly, if five homes for the aged were built, they might best be located and constructed somewhat as follows:

TABLE XVIII

NEEDED BOARDING HOMES FOR THE AGED

Counties Served	*Size of Home*
Fairfield	220 beds
New Haven	275 "
Hartford and Litchfield	280 "
Tolland and Windham	90 "
Middlesex and New London	135 "
	1,000 beds

The proposed homes for the aged listed in Table XVIII are suggested, not to replace existing homes established by towns or private agencies, but to provide adequate care for those who are not receiving it under the present limited facilities. No doubt certain towns now operating farms or homes might transfer them to the state to be included in an integrated system of state homes for the aged.

There seems to be little probability of such state-operated homes offering severe competition to the present boarding homes for the aged, licensed by the Public Welfare Council, although they should serve to set more desirable standards than are now met by some private homes.

7. *Custodial Homes for Chronic Alcoholics*

Some type of institutional or colony care is needed for a large group of permanently disabled and incurable chronic alcoholics who would not benefit either from the nursing care in the infirmaries or the type of boarding home described above. These persons are now resident in town farms, jails and mental hospitals. This proposal is, of course, only a temporary makeshift, considering the huge problem presented by the chronic alcoholic and vagrant group. It is recommended, therefore, that an extensive study be made of the problem of chronic alcoholism and drug addiction under instruction to report to the 1947 General Assembly.

VI. CONCLUSIONS AND RECOMMENDATIONS

An over-all consideration of the above findings leads to the following recommendations, which are based directly upon the findings discussed in the various sections of this report. These are considered to be both conservative as to extent or range and flexible as to final mode of operation. It is important that the problems here studied be viewed as a whole and that long-term objectives be planned.

A. *Administration*

It is recommended that a board or commission be established to administer the program outlined above of care for the ill and aged. There should be a chief executive, employed by the board or commission, which

should include the Commissioners of Health, and Welfare, and representatives of the medical profession, the medical schools and the public. Because of the closely related work and responsibilities of the state's five hospitals for the mentally ill and defective, and the possibilities of economy through cooperation, some system should be devised under which the administration of the board or commission for the chronically ill and infirm might enjoy close cooperation with these other institutions. This body should operate the whole institutional program and the system of outpatient clinics. The home medical and nursing care might best be a development of the present medical program of the Office of Commissioner of Welfare.

It is of paramount importance that the policy and practice of this board or commission give recognition to the fact that the care of the chronically ill is both a medical and socio-economic problem. As such, there should be close integration with contemporary medical practice and knowledge. The chronic illnesses are not different in kind from other illnesses. This program, therefore, needs the constant interchange of knowledge and stimulus with the medical profession, the medical schools and the general hospitals.

The board or commission will find that its chief problem during the first few years is the selection of adequate medical, nursing and social service staffs for this work. Because of the dearth of specific knowledge about the treatment of these diseases, or because the physician seldom gets to see the patient in time to give effective treatment, there is undue pessimism or lack of interest. At the present time, it should be recognized that professional people might not be eager to enter this field of work. However, the program deserves the best of professional skills and it is expected that the provision of opportunities and grants for research, of close relationship with medical schools and general hospitals, and of attractive salaries and progressive policies will make it possible to enlist well-trained and able professional personnel.

B. *Recapitulation of need for Institutional Beds*

The following table, XIX, shows, in a condensed form, the basis for the statement of need for 5,000 institutional beds for the care of chronically ill adults. It is based upon the assumption that institutional beds will be used much more by patients who are already cared for in hospitals or outside their own homes and by patients whose assistance grants are large, than by patients cared for in their own homes at smaller public expense. Table XIX includes only those patients who are now receiving public assistance.

It may be seen in this table that as physical disability decreases in severity, so also does the proportion to be admitted to institutions. Likewise, as responsibility is taken by the family at home, the proportion to be admitted decreases.

TABLE XIX

DISTRIBUTION OF PATIENTS IN STATE INFIRMARIES AND CHRONIC DISEASE HOSPITALS ACCORDING TO PHYSICAL CONDITION AND PRESENT RESIDENCE

	Total Number Chronically Ill	*Estimated Number Needing Care In:* *Infirmary*	*Chronic Hospital*	*Percentage*
Bedridden Patients	1,650	874	330	73
Alone	33	8	5	39
With relatives	627	150	60	33
Boarding	165	120	40	97
Chronic & Convalescent Hospital	429	344	85	100
General Hospital	182	82	100	100
Other	214	170	40	98
Partially Ambulatory Patients	6,132	1,530	480	33
Alone	858	42	20	7
With relatives	3,250	400	100	15
Boarding	1,042	400	200	58
Chronic & Convalescent Hospital	307	247	60	100
General Hospital	61	41	20	100
Other	614	400	80	78
Ambulatory Patients	9,830	1,596	190	18
Alone	1,845	10		1
With Relatives	4,314	75	20	2
Boarding	1,834	400	20	23
Chronic & Convalescent Hospital	191	151	40	100
General Hospital	70	60	10	100
Other	1,576	900	100	63
Total	17,612	4,000	1,000	28

C. *Building Program and Capital Costs*

The following building program is recommended. It is impossible at this time to estimate building costs in the post war period, or the extent of possible federal participation in such costs, but they should come within the limits suggested below.

1. *Chronic Hospitals* (See page 41 for discussion)

New Haven	600 Beds	$ 660,000. to $ 840,000.
Hartford	400 Beds	440,000. to 560,000.
	1,000 Beds	$1,100,000. to $1,400,000.

2. *Infirmaries* (See page 39 for discussion)

Bridgeport Area	800 Beds	$ 800,000. to $ 960,000.
New Haven Area	900 Beds	900,000. to 1,080,000.
Waterbury Area	800 Beds	800,000. to 960,000.
Hartford Area	850 Beds	850,000. to 1,020,000.
Norwich Area	650 Beds	650,000. to 780,000.
	4,000 Beds	$4,000,000. to $4,800,000.[1]

3. *Boarding Homes for the Aged* (See page 42 for discussion)

Counties Served		
Fairfield	220 Beds	$ 198,000. to $ 242,000.
New Haven	275 Beds	247,500. to 302,500.
Hartford and Litchfield ..	280 Beds	252,000. to 308,000.
Tolland and Windham ...	90 Beds	81,000. to 99,000.
Middlesex and New London	135 Beds	121,500. to 148,500.
	1,000 Beds	$ 900,000. to $1,100,000.

4. *Total Capital Costs of Building Program* $6,000,000. to $7,300,000.[1]

D. *Annual Maintenance and Operating Costs*

1. Chronic Hospitals ..... 1,000 patients	$1,000,000. to	$1,200,000.
2. Infirmaries ..... 4,000 patients	2,400,000. to	3,000,000.
3. Boarding Homes .... 1,000 residents	500,000. to	600,000.
4. Out-patient Clinics 35 clinics should ultimately handle 140,000 to 150,000 visits per year at $2.50 each	350,000. to	375,000.
5. Public Health Nursing (state cases only)	200,000. to	220,000.
6. Research and Training in chronic hospitals and infirmaries	100,000. to	125,000.
7. Administrative Costs of Board or Commission	50,000. to	60,000.
Total estimated annual operating costs	$4,600,000. to	$5,580,000.

[1] The municipal homes of several of the cities might be bought and remodeled by the state, which would permit a great decrease in this figure.

The above operating estimates are for gross costs. The actual net operating costs to the state would be substantially less, due to payments by the patients and their relatives.

E. *Comparative Costs of Present and Proposed Care of Chronically Ill and Aged*

While there is little doubt that any reasonable public expenditure toward improved public health would result in ultimate public savings, it is difficult to present proof or demonstrate the truth of the statement in terms of the data now at hand.

It is a fair question to ask just how much more or less the proposed plan of institutional care would cost than our present care for the same people. The following tables show the present and estimated costs of care for recipients of the three major categories of public assistance: Old Age Assistance and Aid to the Blind, Division of State Aid, and town relief.

1. *Old Age Assistance and Aid to the Blind*

The data on costs were supplied through the courtesy of the Executive Accountant of the Office of Commissioner of Welfare.

Table XX is derived from the records of the four months, July to October, 1944. Columns 1 and 2 at the bottom of the table indicate the probable disposition of the 14,358 assistance recipients according to evidence of medical condition and present residence of these persons given in the main body of this report, see page 26. Column 5, "Federal Contribution," indicates the expectancy of federal participation in the costs

TABLE XX

RECIPIENTS OF OLD AGE ASSISTANCE AND AID TO THE BLIND
PRESENT AND PROPOSED CARE AND COSTS[1]

1. *Placement*	2. *Number*	3. *Estimated Cost Per Year Per Person*	4. *Total Cost*	5. *Federal Contribution*	6. *Net Cost to State*
"A"—Cared for in Chronic and Convalescent Hospitals Licensed by State[2]	609	$1,095	$ 666,624	$ 144,648	$ 521,976
"B"—Recipients of over $40 per month[2]	423	553	234,096	101,640	132,456
"C"—Other Recipients[2]	13,326	393	5,242,968	2,571,720	2,671,248
"D"—Cared for in State aided Hospitals[3]	98[4]	539	52,773[5]	.....	52,773
	14,358		$6,196,461	$2,818,008	$3,378,453
Estimated Costs of Proposed Plan					
Chronic Hospital	500	$1,000	$ 500,000	$ 120,000	$ 380,000
Infirmary	3,000	600	1,800,000	.....	1,800,000
Out-patient and Home Medical Care	6,000	480	2,880,000	1,440,000	1,440,000
Boarding Home	500	500	250,000	.....	250,000
No Medical Care	4,358	391	1,703,978	851,989	851,989
Total Proposed Costs	14,358		$7,133,978	$2,411,989	$4,721,989
Estimated additional costs					1,343,536

[1] The following estimates are of costs before deduction of receipts from beneficiaries.
[2] Based upon average costs for four months, July to October, 1944.
[3] Based upon expenditures for hospitalization of OAA patients, for six month period, January to June, 1944.
[4] This is estimate of average number of OAA recipients in hospitals at any one time and is included among the patients in categories "A", "B" and "C" above.
[5] Based upon estimate of 33,282 days care in state-aided hospitals @ $1.14 per day, 2,466 days care in municipal hospitals @ $6. per day and 6 days care in out-of-state hospitals @ $4 per day.

of patients temporarily placed in state chronic hospitals. In practice, the federal government has been doing this for Old Age Assistance cases which are hospitalized in state institutions for less than six months. It is estimated that the period of hospitalization under the proposed plan would average 14 days.

2. State Aid Division of the Office of Commissioner of Welfare

This division handles the support and care for all persons who do not come under the other state and town assistance programs for state and town citizens. The data was kindly supplied by the Director of this division. See Table XXI.

TABLE XXI

RECIPIENTS OF STATE AID

PRESENT AND PROPOSED CARE AND COSTS*

	Cost of Care—Fiscal Year ended June 30, 1944			*Cost of Proposed Care in State Institutions*		
Placement	*Number of Persons*	*Total Days Care*	*Total Cost to State*	*Number of Persons*	*Total Days Care*	*Total Cost to State*
General Hospitals Subsidized by State in 1944	1,137	31,380	$ 35,856	....	.....	.....
Chronic Hospitals	....	.....	.....	(1,000)[1]	14,000	$ 38,356.
Infirmaries	....	.....	.....	1,137	17,380	28,572.
Miscellaneous Hospitals	904	50,345	142,681.	....	.....	.....
Chronic Hospitals	....	....	.....	(500)[2]	7,000	19,178.
Infirmaries	....	....	.....	904	43,345	71,265.
Nervous and Mental Hospitals (Private)	6	856	2,320.	....	.....	.....
Infirmaries	....	.....	.....	6	856	1,407.
Chronic and Convalescent Hospitals	169	28,913	79,747.	....	.....	.....
Infirmaries	....	.....	.....	169	28,913	47,528.
Boarding Homes for Aged	87	23,699	33,862.	....	.....	.....
Boarding Homes	....	.....	.....	87	23,699	32,465.
Town Farms and Homes	987	206,532	208,192.	....	.....	.....
Infirmaries	....	.....	.....	87	18,209	30,000
Boarding Homes	....	.....	.....	900	188,323	258,000.
Total	3,290	341,725	$502,658.	3,290	341,725	$526.771.
Estimated Additional Cost						$24,113.

* Based on expenditures of State Aid Division, Office of Commissioner of Welfare, for fiscal year ended June 30, 1944.

[1] 1000 of 1137 persons in general hospitals who spend 14 days each in chronic hospitals.

[2] 500 of 904 persons in miscellaneous hospitals who spend 14 days each in chronic hospitals.

It may be seen that, under the proposed plan, many of those patients now cared for in general and miscellaneous hospitals would be cared for in infirmaries which could give adequate care at less cost than the chronic hospitals. In general, it is thought that patients may need only two weeks chronic hospital care, if follow-up treatments can be given in the infirmaries.

The estimated additional costs of this plan, $24,113, are due to additional costs of approximately $31,072 for those 1,137 persons cared for in the subsidized general hospitals, and about $80,000 for those 987 persons now in town farms. These additional costs are not quite balanced by the great savings on other patients in other placements.

Table XXI shows the number of state-aid patients cared for during the fiscal year of 1944, rather than the different dispositions of these persons at any one time. Based upon their average length of stay, there should be, at any one time, about 575 patients in chronic disease hospitals at an annual cost of $575,000; 295 patients in infirmaries at an annual cost of $177,000; and 65 persons in boarding homes at an annual cost of $32,500. The total annual cost of these patients there would be $784,500.

The following table, XXII, indicates the change in amount and disposition of state aid over the past three years. This is included here as possible indication of a trend which may continue or be reversed, depending upon the stability of population and migration in and from the state.

TABLE XXII

STATE AID PLACEMENTS AND COSTS OVER LAST THREE YEAR PERIOD

FISCAL 1942, 1943, 1944

Placement	*Year*	*No. Persons*	*Average Days Care Per Person*	*Total Cost*
General Hospitals	1942	2,555	....	$51,883.
subsidized by	1943	1,661	19.1	36,318.
state	1944	1,137	27.6	35,856.
Miscellaneous	1942	1,862	....	145,292.
Hospitals	1943	1,601	32.6	151,104.
	1944	904	55.7	142,681.
Licensed	1942	43	....	5,095.
Nervous and Mental	1943	15	61.3	1,936.
Hospitals	1944	6	142.7	2,320.
Licensed Chronic	1942	332	....	44,998.
and Convalescent	1943	379	67.0	58,947.
Hospitals	1944	169	171.1	79,747.
Licensed	1942	284	....	27,679.
Boarding	1943	335	85.0	38,197.
Homes	1944	87	272.4	33,862.
Town Farms	1942	4,038	....	274,790.
and	1943	3,311	75.0	241,815.
Homes	1944	987	209.3	208,192.

The rather startling increase in the average duration of care of these state-aided patients is of considerable significance. Its meaning is to be seen, probably, in the reduction of numbers of patients to the most serious cases which require longer care. The less serious cases, apparently, were not in need of state aid in the fiscal year of 1944. The broadening

of the medical care program is also partially responsible for the increased care per person.

3. *Town Relief*

Approximately 40% of town relief cases are supported by the Division of State Aid through reimbursement of towns, which give the assistance directly. The data in Table XXIII, following, are based upon the other 60%, or 1,648, of the 2,747 chronically ill town relief recipients. The estimates of present placements and their present costs are based upon data discussed in the body of the report, see page 27.

It may be seen under "proposed placement" that 824, or half of these cases, would be left in their present residence at present rates of assistance.

The estimated saving of $132,850 is slightly over 16% of estimated present costs.

TABLE XXIII

TOWN CASES

PRESENT AND PROPOSED CARE AND COSTS*

	Present Placement and Estimated Costs			*Proposed Placement and Costs*		
	Number of Persons	*Estimated Cost Per Year Per Person*	*Estimated Total Cost Per Year*	*Number of Persons*	*Estimated Cost Per Year Per Person*	*Estimated Total Cost Per Year*
Alone	268	$ 250.	$ 67,000.	168	$ 250.	$ 42,000.
Boarding Home	...	....	.....	45	500.	22,500.
Infirmary	...	....	.....	50	600.	30,000.
Chronic Hospital	...	....	.....	5	1,000.	5,000.
With Family	756	250.	189,000.	656	250.	164,000.
Boarding Home	...	....	.....	50	500.	25,000.
Infirmary	...	....	.....	45	600.	27,000.
Chronic Hospital	...	....	.....	5	1,000.	5,000.
Boarding Home	339	600.	203,400.	319	500.	159,500.
Infirmary	...	....	.....	10	600.	6,000.
Chronic Hospital	...	....	.....	10	1,000.	10,000.
Chronic and Convalescent Hospital	135	1,250.	168,750.	...	....	.....
Boarding Home	...	....	.....	5	500.	2,500.
Infirmary	...	....	.....	120	600.	72,000.
Chronic Hospital	...	....	.....	10	1,000.	10,000.
General Hospital	123	1,500.	184,500.	....	....	.....
Infirmary	...	....	.....	63	600.	37,800.
Chronic Hospital	...	....	.....	60	1,000.	60,000.
Other	27	500.	13,500.	...	....	.....
Boarding Home	...	....	.....	12	500.	6,000.
Infirmary	...	....	.....	15	600.	9,000.
Total	1,648	....	$826,150.	1,648	....	$693,300.
Estimated Savings						$132,850.

* From the data on 2747 chronically ill town assistance recipients in January, 1944, 40% of whom are state aided cases, leaving 60%, or 1648 cases, aided only by towns.

4. *Town Farms*

About 40% of the town farm residents are supported indirectly by the State Aid Division, leaving about 875 persons supported wholly by their town of settlement. About 88% of these town beneficiaries are chronically ill, many of them having a secondary disorder of chronic alcoholism.

Table XIX shows a total of 2,404 persons now residing in the category "other" which refers to town farms, special and unclassified institutions and homes. The same table indicates that 1,470 of these people should be cared for in state infirmaries. These 1,470 persons include approximately 800 patients now in town farms who should have the type of care given by infirmaries. Since the town farms now have about 1,475 residents, there would be a remainder of about 675 persons who would need care in state boarding homes.

The 875 town farm residents supported by their towns should be divided approximately according to the preceding paragraph, which would mean 475 to be placed in infirmaries, 370 in boarding homes, and 30 in chronic hospitals.

The town farms report an average cost of about $515. per year, exclusive of certain capital and administrative costs. The present costs to towns for the care of these 875 persons is, therefore, approximately $450,625 per year in direct operating costs.

At a cost of $600 per year per person in infirmaries, the 475 so placed would cost $285,000. The 370 placed in boarding homes at $500 per year, would cost $185,000 and the 30 in chronic hospitals would cost $30,000, making a total cost of $500,000 for infirmary, boarding home and chronic hospital care, which is $49,375 above the present basic operating costs.

5. *Summary*

The chief agencies whose present clients would constitute the great majority of the residents of the proposed chronic disease hospitals, infirmaries and boarding homes are Old Age Assistance, Aid to the Blind, State Aid, town welfare and town farms. Table XXIV shows the probable numbers of these persons who should be cared for in the state institutions. In the cases of State Aid and town farm beneficiaries, the table assumes the care of the same number now cared for at public expense in similar agencies (see Table XXI). The totals of patients to be cared for are seen, in Table XXIV, to be larger than the proposed numbers of beds to be provided in the new institutions. This is why the present building proposals should be considered as minimal needs.

TABLE XXIV

ESTIMATED NUMBER OF PATIENTS NEEDING INSTITUTIONAL CARE AND COMPARISON OF COSTS

Agency	*Present Recipients*	*Chronic Hospitals*	*Infirmaries*	*Boarding Homes*	*Present Public Expense*	*Proposed Cost*
Town Farms	875[1]	30	475	370	$450,625.	$500,000.
Towns	823[2]	90	303	430	826,150.	693,300.
State Aid	935[3]	60	297	578	502,658.[6]	526,771.
Old Age Assistance ..	14,358[4]	500	3,000	500	3,325,680.	4,721,989.
Other Agencies	8,300[5]	400	500	100	.....	750,000.[7]
Totals	25,291	1,080	4,575	1,978		

[1] These are present town farm residents maintained by their towns of settlement. About 800 of them are chronically ill.

[2] These are chronically ill town relief recipients who are cared for by town of settlement outside their own homes at greater expense than would be required under this proposal.

[3] These are persons now supported at state expense in hospitals, medical and custodial institutions, who could be transferred to state institutions.

[4] These are all Old Age Assistance cases, 10,829 of whom are chronically ill.

[5] These are chronically ill found in the following agencies:
Division of Child Welfare.
Aid to Dependent Children.
Division of Crippled Children.
Mansfield-Southbury Social Service Department waiting list.

[6] This figure includes the cost of 31,380 days care in general hospitals, subsidized by the state, at a stated cost of $1.14 per day. If this hospitalization were appraised at $5.00 per day, the total cost of care for this group would be increased to $623,702. Thus, the proposed plan would mean a saving of about $97,000.

[7] This is the estimated cost of care of only the 1,000 persons estimated to need care in the proposed institutions.

APPENDIX

I. SUPPLEMENTARY STUDIES

A. *Children's Agencies*

Chronic illness is not restricted to the aged or adult population. It is found frequently among children. Since the instructions for the present study concerned the adult population, the major part of the report dealt only with adult agencies. However, chronic illness and permanent handicaps among children are even more serious and of more concern to the state, because they will be of much longer duration than are the illnesses of the present aged population and are potentially of greater expense to the state.

It is even more difficult to make a thorough census of chronic illness or disorders among children than among adults for several reasons:

(1) such children are more likely to be cared for at home or privately, with less chance of being reported to public agencies, and
(2) there is much greater resistance to the recognition of children's disorders as being chronic in nature.

Residual paralyses from poliomyelitis or rheumatic fever are readily accepted as chronic disorders, even though children so afflicted are likely to make successful economic, social, and health adjustments to their handicaps. On the other hand, there are hundreds of children with serious psychological disorders of long duration, yet parents and physicians are generally averse to recognizing the situation for what it is.

Because it was felt that many of the chronically ill children will continue to be or will become patients of public medical programs, a sampling of the records of the following agencies was made:

1. Aid to Dependent Children, Office of Commissioner of Welfare.
2. Division of Child Welfare, Office of Commissioner of Welfare.
3. Division of Crippled Children, State Department of Health.
4. Mansfield-Southbury Social Service Department.

These agencies are concerned primarily with children, but their files show considerable chronic illness among the adults caring for the children. This is particularly true of the program of Aid to Dependent Children as shown in the following tables which indicate:

Table 1—Chief Illnesses of Patients of Children's Agencies.
Table 2—Secondary Illnesses of Patients of Children's Agencies.
Table 3—Chief Illness in Relation to Age.
Table 4—Chief Illness in Relation to Sex and Marital Status.
Table 5—Present Physical Condition by Agencies.
Table 6—Chief Illness in Relation to Amount of Public Assistance.
Table 7—Sources of Diagnoses of Chief Illnessses by Agencies.

Other tables on children's agencies are included in appendix II, D, page 81.

TABLE 1.

CHIEF ILLNESSES AMONG PATIENTS OF CHILDREN'S AGENCIES

(CONDENSED)

Chief Illnesses	*Aid to Dependent Children*	*Division of Child Welfare*	*Mansfield-Southbury*	*Crippled Children*	*Total*	*Group Total*
Epidemic and Communicable	139	29	.....	624	...	792
Pulmonary tuberculosis	122	16	.....	.....	138	...
Non-pulmonary tuberculosis	.....	.....	.....	115	115	...
Poliomyelitis (deformity and paralysis)	.....	4	.....	509	513	...
Rheumatism, Nutritional and General Diseases	134	7	.....	75	...	216
Diseases of Heart, Circulation and Blood	227	21	.....	606	...	854
Diseases of heart	145	18	.....	606	769	...
Diseases of Nervous System and Sense Organs	254	173	695	32	...	1,154
Mental deficiency	54	74	639	.....	767	...
Diseases of Respiratory System (non-tuberculous)	63	10	.....	.....	...	73
Diseases of Digestive System	59	1	.....	3	...	63
Diseases of Genito-Urinary System (non-venereal)	36	.....	.....	17	...	53
Diseases of Skin, Bones and Muscles	20	11	.....	255	...	286
Diseases of bones	.....	.....	.....	162	162	...
Deformities, Malformations and Results of Accidents	55	25	.....	2,472	...	2,552
Birth injuries and congenital defects of nervous system	.....	3	.....	768	771	...
Spinal deformities	.....	.....	.....	251	251	...
Deforming accident (non-industrial)	.....	.....	.....	71	71	...
Orthopedic disorders (non-poliomyelitic)	.....	4	.....	723	727	...
Congenital malformations (except c.n.s.)	20	10	.....	604	634	...
Cancer and Other Tumors	14	.....	.....	15	...	29
Ill-defined and Other Diseases	60	4	6	3	...	73
Total	1,061	281	701	4,102		6,145

Table 2.

Secondary Illnesses

Children's Agencies

Illnesses	*Aid to Dependent Children*	*Division of Child Welfare*	*Mansfield-Southbury*	*Crippled Children*	*Total*	*Group Total*
Epidemic and Communicable	21	2	5	5	...	33
Venereal diseases	11	2	3	.....	16	...
Rheumatism, Nutritional and General Diseases	54	2	5	3	...	64
Rheumatism and arthritis	22	.....	2	3	27	...
Diabetes	5	.....	.....	.....	5	...
Chronic alcoholism	3	.....	2	.....	5	...
Diseases of Heart, Circulation and Blood	114	5	2	15	...	136
Diseases of heart	25	4	2	15	46	...
Arteriosclerosis	3	.....	.....	.....	3	...
Anemia	14	1	.....	.....	15	...
Varicose veins	24	.....	.....	.....	24	...
Diseases of Nervous System and Sense Organs	92	31	79	.....	...	202
Apoplexy, hemorrhage and shock	5	.....	.....	.....	5	...
Paralysis	.....	.....	5	.....	5	...
Mental deficiency	11	11	5	.....	27	...
Diseases of eye or ear	19	5	16	.....	40	...
Diseases of Respiratory System (non-tuberculous)	25	6	3	.....	...	34
Asthma	6	2	2	.....	10	...
Diseases of Digestive System	38	1	.....	.....	...	39
Diseases of gall bladder	16	.....	.....	.....	16	...
Hernia	3	1	.....	.....	4	...
Diseases of Genito-Urinary System (non-venereal)	25	2	.....	.....	...	27
Kidney diseases other than nephritis	6	1	.....	.....	7	...
Diseases of Skin, Bones and Muscles	9	2	2	.....	...	13
Deformities, Malformations and Results of Accidents	16	7	18	12	...	53
Orthopedic disorders (non-poliomyelitic)	6	2	8	5	21	...
Cancer and Other Tumors	6	.....	.....	.....	...	6
Malignant tumors	2	.....	.....	.....	2	...
Ill-defined and Other Diseases	66	3	.....	.....	...	69
Unknown	595	220	587	4,067	...	5,469
Total	1,061	281	701	4,102		6,145

Table 3.

Chief Illness in Relation to Age

Children's Agencies

Chief Illness — *Age in years:*	*Unknown*	*75+*	*70-74*	*65-69*	*60-64*	*50-59*	*40-49*	*30-39*	*20-29*	*10-19*	*0-9*	*Total*	*Median Age*
Epidemic and Communicable	74	..	..	2	2	2	11	15	59	460	167	792	14
Rheumatism, Nutritional and General Diseases	29	..	3	..	6	24	23	14	8	55	55	217	17
Diseases of Heart, Circulation and Blood	87	..	3	..	6	20	51	31	47	401	209	855	14
Diseases of Nervous System and Sense Organs	66	..	..	..	4	28	48	58	170	451	327	1152	14
Diseases of Respiratory System (non-tuberculous)	9	..	..	..	..	5	9	14	2	26	8	73	19
Diseases of Digestive System	15	..	..	..	2	5	16	14	2	5	4	63	29
Diseases of Genito-Urinary System (non-venereal)	9	..	..	..	..	5	8	8	..	6	17	53	19
Diseases of Skin, Bones and Muscles	5	..	..	..	..	..	5	3	19	178	78	288	13
Deformities, Malformations and Results of Accidents	30	..	..	..	..	2	6	9	97	1113	1298	2555	9
Old Age and Senile Deterioration		1	..	..	..	..	..	..	..	....	....	1	..
Cancer and Other Tumors	3	..	..	..	..	..	6	2	..	9	8	28	15
Ill-defined and Other Diseases	20	..	2	..	..	6	8	12	..	13	7	68	33
Total	347	1	8	2	20	97	191	180	404	2717	2178	6145	12 yrs.

TABLE 4.

CHIEF ILLNESS BY SEX AND MARITAL STATUS

CHILDREN'S AGENCIES

Chief Illness	Men Marital Status					Women Marital Status					Total Marital Status				
	?	S.	M.	D.S.[1] & W.	Total	?	S.	M.	D.S.[1] & W.	Total	?	S.	M.	D.S.[1] & W.	Total
Epidemic and Communicable	...	373	39	...	412	2	342	8	22	374	8[2]	715	47	22	792
Rheumatism, Nutritional and General Diseases	2	55	12	...	69	2	60	9	76	147	4	115	21	76	216
Diseases of Heart, Circulation and Blood	...	327	24	5	356	3	356	9	130	498	3	683	33	135	854
Diseases of Nervous System and Sense Organs	2	506	51	7	566	...	463	23	97	583	6[2]	969	74	104	1,153
Diseases of Respiratory System (non-tuberculous)	...	22	12	8	42	2	13	3	13	31	2	35	15	21	73
Diseases of Digestive System	...	6	11	...	17	...	3	9	34	46	...	9	20	34	63
Diseases of Genito-Urinary System (non-venereal)	...	17	2	...	19	...	6	3	25	34	...	23	5	25	53
Diseases of Skin, Bones and Muscles	...	171	2	...	173	...	105	2	8	115	...	276	4	8	288
Deformities, Malformations and Results of Accidents	...	1,306	3	...	1,309	...	1,221	5	9	1,235	11[2]	2527	8	9	2,555
Old Age and Senile Deterioration	...	...	...	...	...	...	...	...	1	1	...	...	...	1	1
Cancer and Other Tumors	...	9	2	...	11	...	9	3	6	18	...	18	5	6	29
Ill-defined and Other Diseases	...	12	...	...	12	...	13	9	32	54	2[2]	25	9	32	68
Total	4	2,804	158	20	2,986	9	2,591	83	453	3,136	36	5,395	241	473	6,145

[1] Divorced, separated and widowed.
[2] Includes cases of unknown sex.

Table 5.

Present Condition of Patients of Children's Agencies

	Crippled Children	*Aid to Dependent Children*	*Division of Child Welfare*	*Mansfield-Southbury*	*Total*	*Percentage*
Bedridden	....	16	5	45	66	3
Wheelchair	....	13	1	2	16	1
Partially Ambulatory	....	133	14	63	210	10
Wholly Ambulatory	177	802	222	564	1,765	86
Unknown	3,925	97	39	27	4,088	...
Total	4,102	1,061	281	701	6,145	100

Table 6.

Distribution of Chief Illness By Amount of Public Assistance

Children's Agencies

Chief Illness	*Unknown*	*None*	*$ .01- 2.99*	*$3.00- 5.99*	*$6.00- 8.99*	*$ 9.00- 11.99*	*$12.00 14.99*	*$15.00- 17.99*	*Total*	*Median Amt. Per Week*
Epidemic and Communicable	21	7	653	71	32	4	4	..	792	$1.80
Rheumatism, Nutritional and General Diseases	2	5	102	43	47	18	..	..	217	3.20
Diseases of Heart, Circulation and Blood	3	2	655	102	65	22	3	4	856	2.00
Diseases of Nervous System and Sense Organs	746	11	85	143	110	26	25	6	1152	5.40
Diseases of Respiratory System (non-tuberculous)	2	..	9	33	24	3	2	..	73	5.50
Diseases of Digestive System	..	..	14	11	33	5	..	..	63	6.60
Diseases of Genito-Urinary System (non-venereal)	..	..	26	16	8	3	..	..	53	3.20
Diseases of Skin, Bones and Muscles	8	..	261	10	8	..	..	1	288	1.60
Deformities, Malformations and Results of Accidents	7	..	2482	35	22	5	2	1	2554	1.50
Old Age and Senile Deterioration	..	..	1	..	..	..	..	..	1	
Cancer and Other Tumors	..	..	19	5	3	1	..	..	28	2.30
Ill-defined and Other Diseases	2	2	18	16	27	3	..	..	68	5.70
Total	791	27	4325	485	379	90	36	12	6145	$1.85

TABLE 7.

SOURCES OF DIAGNOSES BY CHILDREN'S AGENCIES

	Mansfield-Southbury	*Division of Child Welfare*	*Aid to Dependent Children*	*Crippled Children*	*Total*	*Percentage*
Physician	137	210	759	4,102	5,208	85
Nurse	2	...	2	...	4	...
Social Worker	562	31	217	...	810	13
Other	...	40	83	...	123	2
Total	701	281	1,061	4,102	6,145	100

1. *Aid to Dependent Children*

Under this program of state aid, funds may be given to parents or guardians who are unable to give proper care to children in their charge. In January, 1944, this aid was going to 4,571 children through 1,795 families.

Analyses of the case records yielded 1,061 cases of chronic illness. The most frequent chief illnesses, as shown in Table 1, page 55, were:

Diseases of the Heart	145
Pulmonary Tuberculosis	122
Mental Deficiency	54
Arthritis or Rheumatism	53
Diseases of Eye or Ear	46

Although this is a children's agency, the majority of cases of chronic illness was found among adults. The median age of these patients was 31 years, with 1% older than 65 years and only 39% of the group under 20 years of age, which means that about 650 adult patients should have been included with the major or adult study. There were 703 women or girls who constituted 66% of the group. Sixty-two per cent of the women were divorced, separated, or widowed, a situation which was apparently partially responsible for their needing public assistance.

Three per cent of the whole group are confined to bed or wheelchair and it is apparent from the records studied that 94% of the whole group may expect to be disabled more than ten years. However, there seems to be a good possibility of vocational rehabilitation for at least half of this group.

2. *Division of Child Welfare*

Study of the records of this department of the Office of Commissioner of Welfare yielded 281 cases of chronic illness. Table 1, page 55, shows that the most frequent disorders here were:

Mental Deficiency	74
Psychiatric Disorders	63
Diseases of the Heart	18
Pulmonary Tuberculosis	16
Epilepsy	14

The median age of this group of disabled children was 10 years. Forty-one per cent of the group are girls. It is estimated that the future duration of their disorders will be over 10 years in practically all cases, though there should be the possibility of remedial therapy in a certain proportion, particularly the psychiatric disorders.

3. *Division of Crippled Children, State Department of Health*

This department has records of 4,102 handicapped children in its active files. The degree of handicap varies from such conditions as flat feet to complete paralysis. The most frequent of their disorders are as follows:

Deformities as results of birth injuries, and congenital defects of the nervous system	768
Orthopedic Disorders (excluding crippling from infantile paralysis	723
Diseases of the Heart (largely rheumatic fever)	606
Congenital Malformations (excluding disorders of the nervous system)	604
Paralysis and Deformity as a result of Infantile Paralysis	509

(see Table 1, page 55).

The median age of these 4,102 children is 11 years and 44% are under 10 years of age, which indicates the necessity of special instruction by the schools for a considerable number. Forty-eight per cent of the group are girls. Girls seem more inclined than boys to have diseases of the nervous system and sense organs, as 73% of this group are girls, while they are much less likely to have diseases of skin, bones and muscles, as only 38% of this latter group are girls.

4. *Mansfield-Southbury Waiting List*

Over 20,000 persons are known to the Social Service Department of the Mansfield and Southbury institutions for the mentally defective. Of these, there are roughly 700 who are in immediate need of admission because of the lack of adequate care and supervision in their homes or communities. These 700 records were analyzed, as they constitute a group of chronically disabled people for whom there is no satisfactory present provision of systematic supervision.

In order of frequency, their chief disorders were:

Simple mental deficiency	639
Epilepsy	25
Paralysis	8

Those with epilepsy and paralysis were also mentally defective, although this was considered the less serious disorder. See Table 1, page 55. Half of this group is under 15 years of age, but 8% are 30 years of age or older. Fifty-one per cent of the group are female, 93% of whom are unmarried, while 98% of the men and boys are unmarried.

Seven per cent of the mentally defective group are confined to bed or wheelchair and 9% are only partially ambulatory.

The median education is less than four years of schooling, but 11% have finished at least the eighth grade, according to the records studied. There appears to be a possibility of training about one-third of the group for useful occupation.

B. *Workmen's Compensation Recipients*

Those persons injured in the course of industrial employment are frequently rehabilitated and returned to work with no permanent handicap or loss of earning power. A certain number, however, are permanently handicapped. An analysis was made of the records of compensation agreements, since it was felt that many of these cases would come under our criterion of chronic illness. Since it was impossible to tell how many people in this category were disabled during January, 1944, they are, therefore, not included among the 19,858 patients discussed in the first part of the study.

1. *Method of Study*

All agreements and stipulated payments filed during 1943 were sampled. Agreements are filed by employers whose folders are filed alphabetically. Employers' folders were studied in alphabetical order until the sample reached at least 40% of the total agreements filed in that district during 1943. The number of agreements and the number studied are shown in Table 8, following.

Table 8.

Study of Workmen's Compensation Agreements

District Office	*Agreements filed 1943*	*Agreements Studied*	*No. found Chron. Disabled*	*Estimated Total Disabled*	*Percentage Disabled*
Bridgeport	4,897	1,600	191	586	12
Hartford	4,174	1,905	198	435	10
New Haven	2,698	1,350	274	573	21
Norwich	2,223	1,889	202	259	12
Waterbury	2,990	1,495	258	516	17
Total	16,982	8,239	1,123	2,369	14

If a record indicated a disability persisting for six months or more, or loss of limb or sense, a code sheet was filled out, including this case among the chronically disabled.

The same coding system was followed in this analysis as with those agencies studied in the main section of this report. A large number of cases were included in which the injury was the loss of most of a finger, although it may be assumed that the occupational handicap in most of such cases will be slight unless they were skilled workers who need the particular finger lost, in their work. It may be assumed, however, that such persons will suffer a permanent handicap in future competition for employment with healthy and physically unimpaired persons. Persons who lost less than two phalanges of a finger were not included in the tabulation.

Table 9.

Workmen's Compensation

Chief Disability By County of Residence

	Fair-field	*Hart-ford*	*Litch-field*	*Middle-sex*	*New Haven*	*New London*	*Tol-land*	*Wind-ham*	*Out of State and Unknown*	*Total*	*Group Total*	*Per-cent-age*
Rheumatism, Nutritional and General Diseases	...	12	...	...	19	...	...	...	...	...	31	1
Disorders of Nervous Sys- and Sense Organs	6	6	4	...	59	14	...	...	6	...	95	4
Disorders of eye or ear	6	4	4	...	42	14	...	...	6	76	...	3
Diseases of Respiratory System (non-tuberculous)	2	2	4	...	25	...	...	...	...	...	33	1
Dust inhalation	2	2	4	...	21	...	...	...	...	29	...	1
Disorders of Digestive System	206	165	103	27	422	173	14	24	75	...	1,209	51
Hernia	206	165	101	27	420	173	14	24	74	1,204	...	51
Diseases of Skin, Bones and Muscles	10	4	2	2	63	...	...	...	4	...	85	3
Deformities, Malformations, and Results of Accidents	173	206	51	31	298	45	21	21	70	...	916	38
Deforming industrial accidents	173	204	49	31	270	45	21	21	68	882	...	37
Total	397	395	164	60	886	232	35	45	155		2,369	
Percentage	17	17	7	2	37	10	1	2	7			100

2. *Chronic Disability and Permanent Handicaps*

Table 9 shows the results obtained in the study of the 1943 compensation agreements. It is noteworthy that hernia constituted over half the cases. The question arises as to whether or not many of these cases did not actually have the hernia at the time of employment and, therefore, whether a routine medical examination could not have resulted in job placement under circumstances that would not have precipitated the hernia. In any case, it would seem that elementary job-placement practices should have prevented most of these cases and thereby saved an enormous amount of money in compensation, not to mention the industrial productivity of hundreds of workers.

The number of deforming accidents and injuries to eyes is an indication of the need for either more and better protective devices or of better training and supervision of employees.

These data give rise to the question of accident proneness among this large group of disfigured workers. Scientific studies have shown that certain persons tend repeatedly to have accidents and that such tendencies are more or less basic personality characteristics. It is probable that industrial personnel departments of the future will employ psychologists to assist in identifying accident-prone workers and in placing them in safe working conditions.

Of the 2,369 compensation cases, 93% are men. A comparison of this percentage with the percentage of men among the total industrial workers would indicate whether men tend more to have compensable accidents and disabilities than women. A greater tendency, shown statistically, might be due, however, to a greater hazard in their jobs.

Those persons who suffered disfiguring accidents had a median age of 39 years, while those compensated for hernia had a median age of 43 years. Of all 2,369 cases, 4% were aged 65 years or more, 25% were between 50 and 64 years, inclusive, 67% were between 20 and 49 years, and 4% were under 20 years of age.

C. *Chronic and Convalescent Hospitals and Boarding Homes for the Aged*

During 1944 there were 234 Boarding Homes for the Aged licensed by the Public Welfare Council. The State Department of Health licensed 133 of these homes as chronic and convalescent hospitals. In addition to these 133 homes, there are about 82 others licensed only as Chronic and Convalescent Hospitals. Following is the summary of licensed homes:

No. of Homes	*Licensed as*	*Licensed by*
82	Chronic and Convalescent Hospital	Department of Health
133	Chronic and Convalescent Hospital and Boarding Home for the Aged	Department of Health and Public Welfare Council
101	Boarding Home for the Aged	Public Welfare Council

A tabulation of data concerning the 234 homes licensed by the Public Welfare Council is summarized in Table 10. The ratings of quality are made as Boarding Homes for the Aged rather than as hospitals. Since all these homes were licensed, it may be assumed that they meet minimum requirements and are satisfactory. Certain data in the table deserve comment:

(1) The homes care for a small number of patients on the average; 8.5 patients per home in the chronic and convalescent hospitals and only 3.7 persons per home in the boarding homes. Fairfield County, however, had an average of 11.1 patients per hospital, although its boarding homes were smallest.

(2) There seems to be no relationship whatever between size of the hospitals and their quality (rank difference rho between average number of patients and average quality was—.05) and there is a slight tendency for the smaller boarding homes to be rated higher in quality than the larger homes (rho between average number of residents and average quality rating is—.23).

(3) Rates charged by the homes with licenses as Chronic and Convalescent Hospitals, in addition to Boarding Homes for the Aged, seem considerably higher than those charged by the boarding homes. The difference of $11.75 between the averages probably represents the additional cost of nursing care. One may not depend too closely upon the average rates given in Table 10 although the relative ranks by county are probably reliable, as these averages were derived from averages assumed from figures quoted by the homes themselves. For example, if a home quotes its rates as varying between $20. and $30. per week, it is assumed to have an average of $25., although it may be actually charging $30. to all but one patient who pays the minimum.

(4) Those licensed as hospitals have considerably better quality ratings as homes for the aged than those licensed only as boarding homes. These quality ratings were based upon the following items, which were considered in rating homes:

1. Evidences of care being given.
2. Housekeeping.
3. Physical facilities and equipment.
4. Food and food services.
5. Qualifications of persons operating home.
6. Comments from persons in the home, as well as from those who are familiar with it.

(5) There is little relationship between the rates charged by the homes and their quality ratings. In the case of the chronic and convalescent hospitals there is a slight tendency (rho = + .36) for the higher priced hospitals to rate higher, while the higher priced boarding homes tend slightly to rate low in quality (rho = —.29).

A special study was made of 38 of the homes licensed both as boarding homes and Chronic and Convalescent Hospitals to get information on the type of patients cared for and other details regarding them. These 38 hospitals studied by personal visit of the Research Director, were a one-third sample of the 113 such hospitals which had reported a patient census of 977 at the first of January, 1944. The following tables, therefore, represent these 977 patients and make no claim to characterize the patients in the 82 chronic and convalescent hospitals licensed only by the State Department of Health.

TABLE 10.

CHRONIC AND CONVALESCENT HOSPITALS AND BOARDING HOMES FOR AGED PATIENTS CARED FOR, RATES AND QUALITY* AS BOARDING HOMES

	Number	*Average Number Patients*	*Average Rate Per Week*	*Average Quality Rating*
Fairfield County				
Chron. and Conv. Hospital	22	11.1	$26.10	1.1
Boarding Home	12	2.4	13.80	0.7
Hartford County				
Chron. and Conv. Hospital	31	9.8	28.60	1.1
Boarding Home	24	4.6	12.10	0.7
Litchfield County				
Chron. and Conv. Hospital	11	5.2	24.45	1.2
Boarding Home	7	4.1	11.80	0.6
Middlesex County				
Chron. and Conv. Hospital	13	9.0	20.30	1.1
Boarding Home	12	3.2	13.85	0.6
New Haven County				
Chron. and Conv. Hospital	30	7.3	24.85	1.0
Boarding Home	24	3.6	14.15	0.8
New London County				
Chron. and Conv. Hospital	14	7.2	22.75	1.0
Boarding Home	7	4.1	13.70	0.4
Tolland County				
Chron. and Conv. Hospital	5	8.0	21.40	0.8
Boarding Home	1	4	....	..
Windham County				
Chron. and Conv. Hospital	7	6.6	18.85	1.1
Boarding Home	14	3.3	12.00	0.9
State				
Chron. and Conv. Hospital	133	8.5	24.80	1.1
Boarding Home	101	3.7	13.05	0.7
Total	234	6.4	$19.65	0.9

* A rating of 1 indicates a fair or average boarding home, O represents a home which is below average, while 2 represents a home which is above average in quality. Litchfield County, for example, has the best average rating (1.2) for its 11 Chron. & Conv. Hospitals, while Windham County has the best average rating for its 14 boarding homes.

The first observation was that all patients had some kind of chronic disorder. Table 11 shows that the most frequent chief illnesses were paralysis in 13% of the cases, senile dementia in 12%, heart disease in 11%, rheumatism and arthritis in 7%, and arteriosclerosis in 6%.

These patients are quite old, with a median age of 74 years. Table 12 shows that 80% are aged 65 and over, and the relative ages according to the major group of chief illnesses.

There is a preponderance of women among the patients as shown in Table 13. A significantly larger proportion of the women have diseases of the nervous system and are suffering from deterioration due to age.

A large proportion, 42%, are confined to bed or wheelchair. In Table 14 these are all grouped under "Bedridden," as most of them are so confined. Only 17% are reported as wholly ambulatory and it may be reasonably suspected that many of these get around with difficulty.

TABLE 11.

CHRONIC AND CONVALESCENT HOSPITALS

CHIEF ILLNESSES

	Total	*Group Total*
Rheumatism, Nutritional and General Diseases	...	86
Rheumatism and arthritis	70	...
Diabetes	14	...
Diseases of Heart, Circulation and Blood	...	234
Diseases of heart	109	...
Arteriosclerosis	58	...
Anemia	16	...
Diseases of Nervous System and Sense Organs	...	309
Apoplexy, hemorrhage and shock	49	...
Paralysis	123	...
Organic nervous disease	49	...
Mental deficiency	28	...
Blindness	28	...
Diseases of Genito-Urinary System (non-venereal)	...	30
Deformities, Malformations and Results of Accidents	...	79
Deforming accident (non-industrial)	51	...
Amputated limbs	21	...
Old Age and Senile Deterioration	...	155
Senile dementia	116	...
Feebleness due to age	39	...
Cancer and Other Tumors	...	35
Malignant tumors	32	...
Ill-defined and Other Diseases	...	49
Total		977

Table 12.

Chronic and Convalescent Hospitals

Chief Illness By Age

Chief Illness — *Age in Years:*	*Unknown*	*75+*	*70-74*	*65-69*	*60-64*	*50-59*	*40-49*	*30-39*	*20-29*	*10-19*	*0-9*	*Total*	*Median Age*
Epidemic and Communicable	..	2	2	..	..	..	3	..	..	..	..	7	..
Rheumatism, Nutritional and General Diseases	..	40	23	7	..	14	2	..	..	..	..	86	71
Diseases of Heart, Circulation and Blood	..	123	44	30	16	9	5	5	..	..	2	234	75+
Diseases of Nervous System and Sense Organs	..	111	51	42	28	35	7	5	2	2	26	309	71
Diseases of Respiratory System (non-tuberculous)	..	3	2	..	..	2	..	..	..	..	..	7	..
Diseases of Digestive System	..	6	3	..	3	..	2	..	..	..	..	14	..
Diseases of Genito-Urinary System (non-venereal)	..	12	9	7	..	..	..	2	..	..	..	30	72
Diseases of Skin, Bones and Muscles	..	2	6	2	2	..	..	..	..	2	..	14	..
Deformities, Malformations and Results of Accidents	..	40	19	9	2	5	2	..	..	..	2	79	75
Old Age and Senile Deterioration	2	127	9	12	5	..	..	..	..	..	..	155	75+
Cancer and Other Tumors	..	9	17	5	2	2	..	..	..	..	..	35	72
Ill-defined and Other Diseases	..	2	2	3	..	..	..	..	..	..	..	7	..
Total	2	477	187	117	58	67	21	12	2	4	30	977	74

TABLE 13.

CHRONIC AND CONVALESCENT HOSPITALS
CHIEF ILLNESS BY SEX

Chief Illness	*Men*	*Women*	*Total*
Epidemic and Communicable	5	2	7
Rheumatism, Nutritional and General Diseases	21	65	86
Diseases of Heart, Circulation and Blood	74	158	234*
Diseases of Nervous System and Sense Organs	86	223	309
Diseases of Respiratory System (non-tuberculous)	7	...	7
Diseases of Digestive System	5	9	14
Diseases of Genito-Urinary System (non-venereal)	19	11	30
Diseases of Skin, Bones and Muscles	7	7	14
Deformities, Malformations and Results of Accidents	32	47	79
Old Age and Senile Deterioration	37	118	155
Cancer and Other Tumors	12	23	35
Ill-defined and Other Diseases	2	5	7
Total	307	668	977

* Includes two cases, sex unknown.

Table 15 indicates that 48% of these patients are receiving public assistance and 77% of those who receive public assistance get it from the state. Specific information as to amount of public assistance was given for only 458 cases. The median amount per week was over $24. The average charge per patient, irrespective of source of payment, was $29.50 per week.

D. *Estimates of Total Number of Chronically Ill in Connecticut*

The present study deals primarily with the health needs of those Connecticut residents who are receiving public assistance, in some form, from towns or the state. The total number of chronically ill found in this study is shown in Table 16 following and in Figure 4, page 11. The relative importance of various specific diseases is shown in Figure 11 following.

The 26,003 patients (Table 16) are drawn from the following agencies: Old Age Assistance, Aid to the Blind, Board of Education of the Blind, town welfare, town farms, private agencies, Division of Child Welfare, Aid to Dependent Children, the Mansfield-Southbury Social Service Department, Division of Crippled Children and two penal institutions. The age distribution of this total group is shown in Table 17,

Table 14.

Chronic and Convalescent Hospitals

Chief Illness By Present Condition

Chief Illness	*Unknown*	*Bedridden*	*Partially Ambulatory*	*Wholly Ambulatory*	*Total*	*Percentage Bedridden*
Epidemic and Communicable	...	5	2	...	7	...
Rheumatism, Nutritional and General Diseases	...	44	40	2	86	51
Diseases of Heart, Circulation and Blood	2	86	97	49	234	37
Diseases of Nervous System and Sense Organs	5	153	116	35	309	50
Diseases of Respiratory System (non-tuberculous)	...	...	5	2	7	...
Diseases of Digestive System	...	7	7	...	14	...
Diseases of Genito-Urinary System (non-venereal)	...	7	14	9	30	23
Diseases of Skin, Bones and Muscles	...	7	5	2	14	...
Deformities, Malformations and Results of Accidents	...	42	28	9	79	53
Old Age and Senile Deterioration	2	35	69	49	155	23
Cancer and Other Tumors	...	14	14	7	35	40
Ill-defined and Other Diseases	...	2	...	5	7	...
Total	9	402	397	169	977	42

Table 15.

Chronic and Convalescent Hospitals
Chief Illness By Public Assistance

Chief Illness	*Unknown*	*None*	*State*	*Town*	*Veterans*	*Federal*	*Two Agencies*	*Total*	*Percent. Receiving Pub. Asst.*
Epidemic and Communicable	...	2	...	5	...	...	...	7	...
Rheumatism, Nutritional and General Diseases	5	30	37	14	...	...	...	86	63
Diseases of Heart, Circulation and Blood	14	104	93	21	2	...	...	234	52
Diseases of Nervous System and Sense Organs	28	176	77	21	...	5	2	309	37
Diseases of Respiratory System (non-tuberculous)	...	2	5	...	...	...	...	7	...
Diseases of Digestive System	...	9	5	...	...	...	...	14	...
Diseases of Genito-Urinary System (non-venereal)	...	7	21	2	...	...	...	30	77
Diseases of Skin, Bones and Muscles	2	5	5	2	...	...	...	14	...
Deformities, Malformations and Results of Accidents	7	33	28	9	...	2	...	79	54
Old Age and Senile Deterioration	5	78	63	2	2	5	...	155	48
Cancer and Other Tumors	...	24	9	2	...	...	...	35	...
Ill-defined and Other Diseases	...	7	...	...	...	...	...	7	...
Total	61	477	343	78	4	12	2	977	48

Table 16.

Distribution of Chief Illnesses By Counties

(Complete Study Condensed)

	Fairfield	Hartford	Litchfield	Middlesex	New Haven	New London	Tolland	Windham	Other	Total	Group Total
Epidemic and Communicable	258	232	96	23	485	73	15	32	5	..	1,219
Pulmonary tuberculosis	59	88	11	6	168	18	6	5	1	362	....
Poliomyelitis (deformity and paralysis)	136	60	72	8	253	37	6	18	3	593	....
Rheumatism, Nutritional and General Diseases	858	658	134	98	913	322	68	138	3	....	3,192
Rheumatism and arthritis	559	407	78	66	566	219	39	98	2	2,034	....
Diabetes	166	133	29	26	242	74	16	26	1	713	....
Diseases of Heart, Circulation and Blood	1,292	1,433	227	171	1,526	558	81	267	17	....	5,572
Diseases of heart	839	881	153	94	1,118	328	51	176	13	3,653	....
Arteriosclerosis	56	116	20	10	98	44	11	12	1	368	....
Anemia	67	109	9	13	58	30	7	13	1	307	....
Diseases of Nervous System and Sense Organs	1,501	1,861	361	256	2,014	630	163	372	73	....	7,231
Apoplexy, hemorrhage and shock	69	69	10	16	144	45	8	20	1	382	....
Paralysis	297	230	51	43	283	75	29	41	3	1,052	....
Mental deficiency	152	231	47	42	332	97	22	69	52	1,044	....
Blindness	422	530	102	53	413	159	34	113	..	1,826	....
Diseases of eye or ear	282	512	85	58	430	103	39	74	1	1,584	....
Diseases of Respiratory System (non-tuberculous)	126	121	20	13	99	39	7	33	..	....	458
Asthma	63	70	12	5	67	29	2	22	..	270	....
Diseases of Digestive System	245	193	44	29	384	108	29	86	1	....	1,119
Hernia	121	59	12	9	201	32	9	32	..	475	....
Diseases of Genito-Urinary System (non-venereal)	138	125	31	26	168	69	10	46	..	....	613
Diseases of Skin, Bones and Muscles	141	137	36	21	161	71	6	23	..	....	596
Deformities, Malformations and Results of Accidents	953	617	273	95	985	346	82	215	18	....	3,584
Amputation of limbs	99	72	13	15	101	77	12	30	3	422	....
Birth injuries and congenital defects of nervous system	247	156	78	22	197	49	25	22	6	802	....
Spinal deformities	61	51	11	17	59	38	8	19	..	264	....
Deforming accident (non-industrial)	69	34	30	11	91	27	4	20	2	288	....
Orthopedic disorders (non-poliomyelitic)	262	112	80	11	266	88	24	62	1	906	....
Congenital malformations (except c.n.s.)	174	139	40	9	188	51	7	51	3	662	....
Old Age and Senile Deterioration	343	305	74	51	263	172	25	86	2	....	1,321
Feebleness due to age	217	198	58	36	181	140	20	77	2	929	....
Senile dementia	126	107	16	15	82	32	5	9	..	392	....
Cancer and Other Tumors	109	109	24	19	180	36	4	23	1	....	505
Malignant tumors	95	93	15	13	141	28	3	22	..	410	....
Ill-defined and Other Diseases	79	212	59	33	107	61	16	26	..	....	593
Ill-defined	71	191	59	33	94	61	16	22	..	547	....
Total	6,043	6,003	1,379	835	7,285	2,485	506	1,347	120	....	26,003

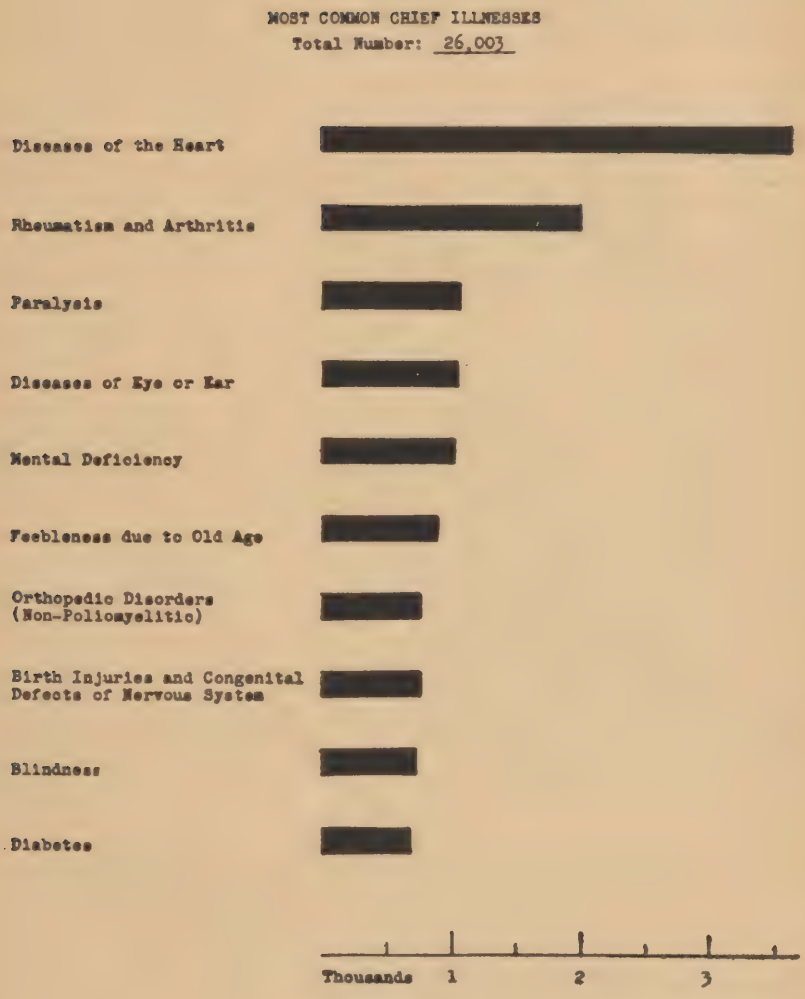
Table 17.

Chief Illness in Relation to Age

Complete Study

Chief Illness — *Age in years:*	*Unknown*	*75+*	*70-74*	*65-69*	*60-64*	*50-59*	*40-49*	*30-39*	*20-29*	*10-19*	*0-9*	*Total*	*Median Age*
Epidemic and Communicable	81	29	32	43	32	57	48	80	114	509	194	1,219	17
Rheumatism, Nutritional and General Diseases	52	1067	771	554	181	248	109	63	23	66	58	3,192	72
Diseases of Heart, Circulation and Blood	147	1883	1316	830	217	218	133	66	68	452	242	5,572	71
Diseases of Nervous System and Sense Organs	144	1903	1024	739	457	780	451	342	401	588	402	7,231	65
Diseases of Respiratory System (non-tuberculous)	14	105	101	71	22	28	31	29	5	40	12	458	68
Diseases of Digestive System	27	414	318	171	36	48	42	34	12	8	9	1,119	72
Diseases of Genito-Urinary System (non-venereal)	15	228	154	111	16	26	14	10	4	14	21	613	72
Diseases of Skin, Bones and Muscles	16	113	75	37	14	21	17	8	28	188	79	596	28
Deformities, Malformations and Results of Accidents	57	303	230	181	66	94	46	29	107	1140	1331	3,584	14
Old Age and Senile Deterioration	18	881	237	131	31	18	5	..	..	..	..	1,321	75+
Cancer and Other Tumors	15	145	99	68	42	70	30	15	2	9	10	505	72
Ill-defined and Other Diseases	38	185	139	96	23	39	24	22	2	15	10	593	71
Total	624	7,256	4,496	3,032	1,137	1,647	950	698	766	3,029	2,368	26,003	68
Percentage		29	18	12	4	6	4	3	3	12	9	100%	

FIG. 11.


MOST COMMON CHIEF ILLNESSES
Total Number: 26,003
Diseases of the Heart
Rheumatism and Arthritis
Paralysis
Diseases of Eye or Ear
Mental Deficiency
Feebleness due to Old Age
Orthopedic Disorders (Non-Poliomyelitic)
Birth Injuries and Congenital Defects of Nervous System
Blindness
Diabetes
Thousands
1
2
3

indicating that chronic illness is not confined to the aged, by any means, although it is frequently well developed to a stage of permanent handicap before it is diagnosed and recognized for what it is.

Comparison with predictions of chronic illness in Connecticut, based upon the studies done in New York City, the National Health Survey and the Massachusetts study,[1] shows some divergences (see Table 18).

These discrepancies are probably due to four chief causes:

1. Latitude of definition of chronic illness: The stricter the definition, and the longer or more serious the incapacity, the smaller the number of cases to be found.
2. Diagnostic groups included: Some studies omit the mentally ill and other groups.
3. Methods of study: Methods vary between house to house investigation and reports from medical agencies; the latter method yields the smallest number.
4. Groups studied: Emphasis upon relief groups or any disproportionate sampling method might yield different results.

The New York City study was probably the most accurate in terms of diagnosis of physical disease and handicap, which may account for the large proportion of cases (68%) under age 65, as compared with this study's proportion of 41%. The National Health Survey's definition would tend to reduce the proportion of young people, as their illnesses tend less to invalid them for such a long period as a year.

Although the chief concern of the present study was with the public assistance recipients, the state is properly concerned with the health of the total population. Public health has become a necessary focus of administrative attention on the part of government. Sickness in one person is the responsibility of all, because all may suffer as a result of the condition of the one person.

It is difficult to estimate the total number of chronically ill in Connecticut, regardless of economic status, on the basis of the data collected in this study. However, the findings in other parts of the country should have a bearing on Connecticut estimates.

On the basis of the four studies mentioned in Table 18, it seems fair to estimate that a total of 100,000 Connecticut residents have been seriously handicapped by physical and mental disabilities for a period of at least six months.

[1] See Footnote Page 3.

TABLE 18.

ESTIMATED NUMBER OF CHRONICALLY ILL IN CONNECTICUT BY AGE

	Under 25 Yrs.		*26-64 Yrs.*		*65 Yrs. and Over*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
New York City Study*	4,800	29	6,400	39	5,100	31	16,300	100
National Health Survey	2,412	4	11,853	18	51,919	78	66,184	100
Massachusetts Study*	27,100	4	446,000	81	77,400	15	550,500	100
Present Study	5,849	22	4,811	19	15,343	59	26,003	100

* The distributions by age are based on the present writer's interpolations, as age range data were not comparable in all four studies.

II. SUPPLEMENTARY INFORMATION

A. *Sampling Procedure—Sources of Error and Limitations*

1. *Sampling Procedure*

It was not considered necessary to study all of the records in some agencies in order to make reliable estimates of the number of chronically ill among the clients of those agencies. This was true of the following agencies for adults: Old Age Assistance, town welfare, town farms, and Board of Education of the Blind.

a. *Old Age Assistance*

These records were studied by town of residence of the recipient. Table 19 indicates the sampling procedure followed, according to the number

TABLE 19.

SAMPLING OF OLD AGE ASSISTANCE CASES

No. of Recipients Per Town	*Percentage of Records Studied*	*Number of Towns*
1-100	100%	136
101-200	80	16
201-300	60	5
301-400	40	5
401-600	20	4
Hartford —1542	25	1
New Haven —1673	21	1
Bridgeport —1007	15	1
		169

of recipients. Records were taken from the public assistance files in each of the four districts of Bridgeport, New Haven, Norwich and Hartford in the alphabetical order in which they were filed, rather than in chronological order.

In estimating the total number of chronically ill recipients of Old Age Assistance in a town such as Hartford, the actual number of patients found in the 25% sample of records was multiplied by four. This multiplier had to be used for each age group, and each of the other categories of information coded on the record sheets. Different multipliers were used with other towns, depending upon the size of the samples.

b. *Town Welfare*

In this group of cases, 100% of the records were studied in all but five towns, in which the sampling is shown in Table 20.

TABLE 20.

SAMPLING OF TOWN WELFARE CASES
(FIVE TOWNS)

Town	*No. Relief Recipients*	*Percentage of Records Studied*
Bridgeport	285	47
Hartford	446	85
New Haven	668	33
Norwalk	287	60
Waterbury	136	60

c. *Town Farms*

The data on all patients in town farms and homes were analyzed, with the exception of those in New Haven and Hartford, where 50% and 54%, respectively, were studied.

d. *Board of Education of the Blind*

In this agency 437 records were studied. This was a sample of 21.1% of the 2,075 patients who were not also receiving assistance under the programs of Aid to the Blind and Old Age Assistance.

2. *Sources of Error and Limitations*

There are unavoidable sources of error in estimates based upon sampling procedure. The larger the sample, however, the smaller the possible error. With the sampling procedure used in this study the probable error is very small. For example, in Hartford there were 1,542 Old Age Assistance recipients. Three hundred and eighty-five records, or 25% were studied, yielding 264 cases. It is within the realm of statistical possibility that all the other 1,177 persons might have been found chronically ill or entirely well; but the best estimate is that these 1,177 persons would have had the same proportions of illness and other characteristics as were found among the records studied.

The most serious source of error existed in the records themselves. This is due to no particular fault in the records, but is because the presence or absence of chronic illness is seldom a question which the social workers who prepare the case histories are required to answer. It is not one of the questions which is routinely and thoroughly investigated. Therefore, our study of records was usually a methodical reading backward of case history records. If the current history indicated an illness, or included a diagnosis, earlier entries were read to find the earliest diagnosis or proof of illness in order to establish duration and find the available medical diagnosis and bills in the record. In hundreds of cases, each case history entry would report that the patient's physical condition continued to be the same and the inclusion of doctor's bills would indicate medical attention, yet one would have to read entries going back ten years or more to find the original medical examination and diagnosis.

Another source of error was the fact that the medical care program of the Office of Commissioner of Welfare, which authorized payments for medical attention in addition to the basic limit of $40.00 per month, began operation in October, 1943, and, due to limitations of staff and other precautionary measures, had not yet reached many of the Old Age Assistance recipients by January, 1944. If the same study were done at the present time, therefore, evidence of a large number of chronically ill patients would be found; their diagnoses and records would be more detailed and up-to-date, and payments would be found to be considerably larger.

It should be mentioned, also, that the care and sharpness with which our investigators analyzed these thousands of records could not help but

vary during the course of the work. The reading of one or two complete case histories can be very interesting, but searching them hour after hour is extremely tiring on both the eyes and the nerves. In general, a worker could not do careful work of this sort for more than six hours per day and this amount of time had to be broken up with frequent rest intervals. Checking the worker's accuracy by having another investigator independently study the same records was done occasionally to verify the reliability of the reports submitted.

In general, the records of the Division of Public Assistance of the Office of Commissioner of Welfare were the most complete in the type of information sought. Among the Old Age Assistance records, evidence of chronic illness was found in 10,829 cases, or about 75%. However, in town relief cases, only 54% were found to be chronically ill. It is felt that there is really not such a great difference in the proportion of sick persons in these two groups, but that a much larger proportion of town cases would have been classified as chronically ill if the towns had been able to do a more complete and professional job of case history making of their relief cases.

B. *Further Investigations Recommended*

1. *Duplication of Welfare and Public Assistance Programs*

An impression gained during the course of this investigation was that the general program of public assistance could be much improved in professional competence and scope, and that great financial economies could be realized if there were a comprehensive simplification of relief procedures and their administration under one authority for the entire state. This is neither the time nor the place to engage in a detailed discussion of the problem, but certain observations might be mentioned for future consideration.

During the past several years there has been a trend in the direction of state responsibility for a large proportion of welfare cases. At present, the towns assume the care of only some 6,500 cases and, in over 40% of these, the costs of care are transferred to the state because of alien status. Roughly 90% of all public assistance or welfare recipients are handled by state agencies. It would seem that the inclusion of all such cases under state programs would result in operating and administrative efficiencies and the saving of money for town taxpayers.

Another observation is that considerable time and expense is incurred in ascertaining a relief recipient's town of settlement. In a state the size of Connecticut, and as well integrated economically and socially as it is, the present settlement laws, which result in much dispute as to which town is responsible for a particular relief recipient, are responsible for waste of time and money. Placing the burden of all welfare upon the state would save this needless expenditure. A study of Connecticut's settlement laws and welfare practices, with special emphasis upon ways of achieving greater efficiency at less cost, would be very desirable.

2. *The Care of Chronic Alcoholics and Drug Addicts*

These persons are chronically ill in a very real sense, yet the present study made no attempt to go thoroughly into the problem of their care and treatment. It is recommended that a special study be devoted to this problem.

C. *Cost of Present Study*

This collection and analysis of data on chronic illness in a total of over 27,000 persons cost approximately fifty cents per case, as is shown in Table 21 following. While this is not an exorbitant expenditure in this type of study, enough information was gained to show that a comparable study might be done with satisfactory accuracy at a cost of about forty cents per case. Such savings might be made chiefly by reducing the size of samples. A brief preliminary study to find comparable towns might result in omitting certain towns entirely from a study.

TABLE 21.

COST OF STUDY OF CHRONIC ILLNESS AND NEEDS OF THE AGED*

A—Personal Services	$12,500.
B—Contractual Services	500.
C—Supplies and Materials	500.
Total Cost	$13,500.
Cost per case (27,000 cases)	50 cents

* This table does not represent an entirely accurate cost account. Much gratuitous service was given in the use of statistical machines in the offices of the Comptroller, Commissioner of Health, Commissioner of Welfare and Personnel Director. These and other credits are mentioned in detail in Appendix II-E.

The care and expense put into this work seemed justified, however, by the need for detailed information by towns, as it was felt that each town would wish to know its own status in relation to the state-wide situation, in order to determine most wisely its course of action in meeting the problem of the care of the chronically ill and aged.

D. *Supplementary Tables*

Rather than increase the cost of printing this report by the inclusion of all tables in support of the discussion in the text, it has been decided to list here those prepared tables which are on file in the Research Division of the Public Welfare Council. These and many other tables may be seen by anyone at any time and, within the capacity of the clerical staff, copies of individual tables and figures will be supplied to those who are professionally concerned with them.

The following tables have a direct bearing upon statements in the text:

Page	*Subject of Table*
	Complete list or table of chief illnesses, not condensed, by county
14	Bedridden Patients:
	Present care
	Age
	Sex and Marital Status
17	Partially Ambulatory Patients:
	Present Care
	Age
	Sex and Marital Status
25	Ambulatory Patients:
	Age
	Present Residence
	Sex and Marital Status
	Amount of Public Assistance
26	Old Age Assistance:
	Age
	Sex and Marital Status
	Present Residence
	Present Condition
	Amount of Public Assistance
27	Town Welfare:
	Age
	Sex and Marital Status
	Present Residence
	Present Condition
	Amount of Public Assistance
29	Town Farms:
	Age
	Sex
	Present Condition
	Present Care
31	Board of Education of the Blind:
	Chief Illness
	Age
	Sex and Marital Status
31	Aid to the Blind:
	Chief Illness
	Age
	Sex and Marital Status
32	Private Agencies:
	Age
	Sex and Marital Status
	Present Condition
	Mental Abnormality
	Public Assistance
	Previous Occupation
	Future Duration
65	Chronic and Convalescent Hospitals:
	Weekly Rates

E. *Cooperating and Assisting Agencies*

It would be impossible to mention by name each person who has given assistance and advice in carrying on this study. Whatever merit the completed study may have is due to good fortune in getting this collaboration from people and agencies now overburdened with their own responsibilities and routine work.

The majority of the cooperating individuals are associated with the following groups, to whom sincere appreciation is due.

I. *Private Agencies*

A. The Advisory Committee of the Connecticut State Medical Society, mentioned by name on page 4.

B. The Connecticut Public Expenditure Council for a special study of town welfare costs and town farm problems in collaboration with this work. Their report is presented herewith.

C. Fifteen general hospitals for data on chronic patients.

D. Seventy-two Visiting Nurse Associations for data on chronic patients.

E. Forty miscellaneous welfare agencies for data on chronic patients.

F. Certain members of the faculty and administration of Yale University.

II. *Towns*

All but two or three towns were visited by a worker or the Director of the Research Division. These towns freely made their records available for study. Their selectmen and welfare officials were particularly generous of their time and interest in discussing the problem of the chronically ill and aged. Through these town officials, visits were allowed to their town farms and homes where superintendents and nurses were always willing to give information on the needs and care of their charges.

III. *Chronic and Convalescent Hospitals*

Thirty-eight of these hospitals were visited for detailed information on the diagnoses and costs of care of their patients. The identity of patients was neither sought nor revealed, but much detailed information on the problems of the private chronic and convalescent hospitals was furnished by their owners and directors.

IV. *Workmen's Compensation Commissioners*

Each of these gentlemen, in their five districts of the state, gave all needed cooperation in getting the desired information from their files.

V. *State Departments*

A. *Office of Commissioner of Welfare.* Through the cooperative interest of the Commissioner, the staffs of the following divisions gave a great amount of time and assistance.

1. Division of Public Assistance which administers Old Age Assistance, Aid to the Blind and Aid to Dependent Children.
2. Division of State Aid.
3. Division of Child Welfare.

Special recognition is due the Medical Adviser of the Commissioner for frequent help in the course of the work and also to the Executive Accountant.

B. *State Department of Health.* The Commissioner gave not only the full cooperation of each of his divisions, but helpful comment and advice as well.

1. Bureau of Preventable Diseases—Division of Cancer Research.
2. Bureau of Vital Statistics.
3. Bureau of Child Hygiene—Division of Crippled Children.
4. Bureau of Mental Hygiene.
5. Department of Health Library.

C. *The Mansfield-Southbury Social Service Department.*

D. *The Board of Education of the Blind.*

E. *Statute Revision Commissioner* for editorial and other assistance of his staff.

F. *Office of the Comptroller* for frequent and long continued use of statistical machines.

G. *Office of the Personnel Director* for use of statistical machines and office equipment.

H. *Members of the Public Welfare Council and Staff* who showed constant interest and gave frequent help in the prosecution of the work.

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SUGGESTIONS
CONCERNING STATE INFIRMARIES FOR THE AGED, INFIRM AND CHRONICALLY ILL

PREPARED BY

CONNECTICUT PUBLIC EXPENDITURE COUNCIL, INC.

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DECEMBER 12, 1944

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SUGGESTIONS CONCERNING STATE INFIRMARIES FOR THE AGED, INFIRM AND CHRONICALLY ILL

The Connecticut Public Expenditure Council became interested in this problem through its studies of local government. We found that as a rule town farms were unsatisfactory both from the humanitarian and the financial points of view. We also found that many cases, even in the towns with farms, were being sent to boarding and convalescent homes at considerable cost. When, therefore, a statewide study of the need of a state infirmary for the aged, infirm, and chronically ill was begun under legislative mandate by the Public Welfare Council, we, in cooperation with that agency, undertook a parallel study primarily from the town standpoint.

A detailed study of all the local almshouses in the state was made with the assistance of Professor Max White of the University of Connecticut, including their physical plant, managerial setup, and finances. At the same time we collected material on the cost of maintaining local and "state" cases (the latter being those without settlement in any town) in boarding and convalescent homes. When the report of the Research Division of the Public Welfare Council was completed it was furnished us confidentially for analysis, especially of its financial features. The following report therefore represents a review of the entire subject.

Comments on Research Division's Report

The report of the Research Division of the Public Welfare Council, prepared under the direction of Dr. Karl F. Heiser, presents a careful and convincing statistical demonstration of the extent of chronic illness among the recipients of assistance from public and private agencies. The total of 19,858 such cases can be confidently accepted as the approximate measure of the quantity of chronic illness, usually the accompaniment of old age, in this group. This total is broken down informatively by counties, by major disorders, by extent of disability, and by the agencies concerned. In thus furnishing a basis for intelligent discussion of the best means of caring for these unfortunates the Public Welfare Council has rendered an important public service.

Dr. Heiser's estimate of 6,000 recipients of assistance for whom the state should provide hospital, infirmary, or boarding-home care in state-constructed institutions was arrived at as follows:

1. All bedridden and partially ambulatory cases not living alone or with their families	3,140
2. One-third of the bedridden and partially ambulatory cases living at home or alone	1,240
3. Patients in state mental hospitals who could more properly be cared for in infirmaries	620
4. Part of 1,720 persons living outside of their own homes but not recorded as chronically ill	1,000
Total	6,000

Of this number he estimates that at any one time 1,000 would be in chronic-disease hospitals, 4,000 in infirmaries, and 1,000, all from the fourth group, in boarding homes. This is stated to be a minimal program, and that in the long run many more persons should be taken care of in state-constructed and state-operated institutions.

Dr. Heiser's suggested 6,000 beds leads to a proposed state building program to cost from $6,000,000 to $7,300,000, and to operational costs, not including debt service, for these new state institutions of $4,400,000 to $5,360,000. Against the latter there would be considerable offsets representing the present expenditures of the state and the towns for the care of these 6,000 persons. These offsets, however, leave, for reasons which will appear more fully as we proceed, a large balance of new expense to be assumed by the state. Dr. Heiser's figures as to comparative costs include all old age assistance recipients whether included in the above program or not, and "state-aid" and town cases now receiving care in general hospitals, which makes it difficult to tie them to the main program. They show, however, an estimated increase of cost over the present of approximately $1,336,947 annually or $1,013,197 if the state's subsidy to hospitals is treated as part of the cost of medical care for state patients.

This program is not, we understand, urged for prompt wholesale adoption but rather as an indication of the magnitude and general nature of the problem which confronts the state. From that point of view it may even err on the side of conservatism. There is, indeed, little logical distinction between some of the classes of persons for whom state beds are said to be required and the remainder of chronically ill in receipt of public assistance. In looking for a practical guide to immediate action, however, consideration should be given to certain factors in the situation which have not entered into Dr. Heiser's conclusions.

OTHER FACTORS TO CONSIDER

The first of these is that the resources of the state in the postwar period will be far from unlimited and the demands upon them already formulated, for buildings, public works, new personnel, and increased compensation, are prodigious. Recent state surpluses have been brought about by unusual revenues, somewhat reduced personnel, and the bar to construction due to the war effort. If the state's income falls to the 1941 level, as it well may, the deferred projects of the last few years will quickly eat up the accumulated surplus. It is inevitable that any program for better care of the aged, infirm, and chronically ill, must compete for state funds with a multitude of other worthy projects. Such a program therefore must be devised with relation to the probable ability of the state to finance it without increasing tax burdens in the critical postwar years.

Second, if state institutions are to be provided for the aged, infirm, and chronically ill, with due regard to cost, it becomes necessary to select those classes of assistance recipients for whom care is now least satisfactorily provided either because of poor quality or high cost or both. In this connection it must be borne in mind that federal grants to old age assistance cases are not available for the chronic inmates of public institutions.

It will therefore be disadvantageous, for example, to remove a patient receiving old age assistance, from a private convalescent home licensed by the state department of health, to a state infirmary, unless the reduction in expense bears some reasonable relation to the size of the federal grant.

Third, the question that now exists as to the future social security policy of the federal government suggests caution in committing the state to an elaborate building program for the benefit of the aged, infirm, and chronically ill at this time. It is not even certain what effect an increase of unemployment will have on the number of such persons requiring public assistance. The possible effects of old age insurance and unemployment compensation, on their present scale, remain obscure, and no one can prophecy with even a faint approximation of accuracy their effect if extended in coverage and increased in amount, as proposed in the Wagner-Murray-Dingell bill and supported by both presidential candidates in the recent campaign. Of still further potential effect on the need for state and local institutions for the aged, infirm, and chronically ill, are the current proposals for health insurance and the subsidization of hospital and clinic facilities by the federal government. It is clear that the general tendency of all these proposals for change in the federal social security system would be to lessen the necessity for state action; as to how much there is no possible way of even making an intelligent guess.

In view of all these circumstances it seems desirable to confine the immediate establishment of state institutions for the aged, infirm, and chronically ill, to what is imperatively called for by the inferior quality of care now received or the undue cost at which it is provided.

IMMEDIATE NEEDS

There are, as nearly as we can determine, approximately 2,500 cases which fall within the above definition. They fall into three groups as follows:

1. Inmates in city and town almshouses	1,472[1]
2. Town and state-aid cases in boarding homes and chronic-and-convalescent homes	519[2]
3. Old age assistance cases in chronic-and-convalescent homes, receiving grants of $60 to $135 per month	438[3]
	2,429

[1] According to spring census 1944.

[2] Average number on books. For derivation of this figure see p. 13 of this report. There were at the time of our study some additional town cases in our second category who were also receiving old age assistance. Because of the change in the old age assistance laws in the 1943 session, which places the full medical care of old age assistance cases on the state, the town payments supplementary to old age assistance on cases in convalescent homes and boarding homes has been rapidly disappearing since October 1, 1943. Since there will soon be very few if any such cases, we have eliminated from the group of town cases all persons who were receiving old age assistance.

[3] Monthly average since July 1, 1944.

The annual cost of the care of these cases is approximately:

In town almshouses	
At town expense	$ 599,585.00[1]
At state expense	236,719.11[1]
In chronic-and-covalescent homes and boarding homes	
At town expense	131,981.27[2]
At state expense	155,452.42[3]
In chronic-and-convalescent homes and hospitals under old age assistance	
State expense	388,116.00[4]
Federal contribution	105,120.00[4]
	$1,616,973.80

[1] As determined from town reports for last town fiscal year ending prior to June 30, 1944.
[2] Total amount spent by the towns in the course of fiscal year ending between June 30, 1943 and September 30, 1944, excluding old age assistance cases.
[3] Total amount spent by the state through the towns for state cases, in the same fiscal period, and excluding old age assistance cases.
[4] Three times the actual expenditure of the last four months.

The state is therefore carrying about 48 per cent of this burden, the towns 45 per cent, and the federal government 7 per cent.

The Town Almshouses

The town almshouse is on its way out, and its passing is not to be regarded with regret but encouraged. There were 66 town almshouses in 1900. There are only 39 today, and every year or two another disappears. Many of the buildings are old and in need of expensive repairs. As a rule the farms do not pay. The care given is necessarily perfunctory. The appearance of low operating cost is illusory when capital investment and the time of superior administrative officers devoted to almshouse matters is considered. The character of almshouse accommodations is such in most instances that those clients needing much care have to be sent to convalescent homes or hospitals. In fact, 28 almshouses, including most of the smaller ones, are not even licensed as convalescent homes and are not supposed to handle bed cases at all though some occasionally do. In their fiscal year covered by this study at least 35 of the 39 towns which have almshouses found it necessary to support in convalescent and boarding homes and hospitals 355 persons, exclusive of old age assistance cases, at a cost to the towns and state of $138,888.81. The arguments in favor of selling the farm and disposing of the few inmates by placing them in other town farms, boarding homes, or convalescent homes is, except for a few large cities and towns, too strong to be permanently resisted. Only four of the existing almshouses are in towns of less than 5,000 population, and only 11 in towns of between 5,000 and 10,000.

The fact is that a good quality of care for the aged, infirm, and chronically ill can be given only at prohibitive expense, except in institutions of considerable size. It is obvious that only the larger cities and towns can justify large almshouses, and only those with exceptional resources can afford the luxury of high-class small ones.

Critical questions as to the repair of buildings will probably hasten the abolition of town almshouses in the postwar period, and by 1955 we may expect to see not more than ten or a dozen almshouses, with very few exceptions all in the largest cities and towns of the state.

TABLE I

NUMBER OF INMATES IN ALMSHOUSES, SPRING 1944[1]

Ansonia	16	Norwich	25
Bridgeport	311	Plainfield	14
Danbury	30	Plymouth	14
Enfield	22	Putnam	8
Glastonbury	8	Salisbury	3
Greenwich	22	Simsbury	6
Greenwich Municipal Hospital[2]	31	Southington	10
Groton	4	Stafford	14
Hamden	2	Stamford	32
Hartford	243	Stonington	13
Killingly	12	Suffield	5
Manchester	25	Thompson	8
Meriden	31	Torrington	17
Middletown	11	Vernon	17
Naugatuck	22	Wallingford	13
New Britain	67	Waterbury	79
New Haven	219	Wethersfield	1
New London	76	Winchester	5
New Milford	6	Windham	24
Norwalk	31	Woodstock	6
Total	1,472		

[1] Source: Census by Mrs. Nusinoff, State Inspector, Public Welfare Council. This inspection occurred on different days in different almshouses during the period January-June, 1944.

[2] Greenwich Municipal Hospital is not included in this census and the figure used is for chronic patients on August 2, 1944.

The number of inmates has in recent years flutuated with economic conditions.

	All Almshouses	*Five Largest Cities*
Spring census 1932	2,318	1,451
Fall census 1934	2,672	1,643
Spring census 1937	2,254	1,415
Spring census 1939	2,577	1,705
Spring census 1944	1,472	919

A recurrence of depression will undoubtedly again increase the number of inmates but scarcely to the 1934 and 1939 levels. The downward trend since 1939 has been accentuated by the development of old age assistance, culminating in the state's assumption since January 1944 of the full cost of medical and hospital care for old age assistance cases. The effects to be expected from old age insurance and other federal security measures in reducing the numbers to be cared for in town and other institutions cannot, as we have already pointed out, be successfully estimated.

Of the 1,472 inmates in the spring of 1944 approximately 1,200, applying Dr. Heiser's figures, are suffering from some form of chronic illness, and of this number about 120 are bed or wheel-chair cases. Our observations indicate that the only able-bodied inmates capable of employment on the farms are periodic drunkards who as long as they remain under restraint act like fairly normal people, and a very few of the moderately feeble-minded who can work under direction. Their numbers are relatively few and neither of these groups can hold its own in a competitive society. In our opinion, therefore, some form of institutional care is required by the whole town almshouse population. The alcoholics, however, require a different type of institution than the more helpless and docile inmates.

The town almshouses as a whole are unsatisfactory both as to their physical plant and the character of their management. Most of the buildings are old—some very old. The only almshouses or portions of almshouses built within the last 15 years are the Greenwich hospital unit, the building at Stamford, one section of the Bridgeport almshouse, a dormitory at Naugatuck, and a wing at Putnam. One of the two buildings at New London was recently completely remodelled. Approximately two-thirds were built before 1900 and several of them are actually more than 100 years old. Most of the old almshouses are converted dwellings or, if built for almshouses, are obsolete in type of construction, and constitute serious fire hazards. One of the largest and by no means the worst is that in Hartford with accommodations for 270. The original building was built in 1886 and its wings in 1899 and 1904. The inmates are housed in large dark and barren wards with parallel rows of 25 to 50 beds. It has recently been branded by the mayor as a fire trap and an unsuitable place to house the aged poor. The people of Hartford have authorized a bond issue of $625,000 to replace it with a modern structure. Another example is the Norwalk almshouse, "Naramake." Built apparently about 70 years ago of wood, with narrow steep stairs and basement kitchen and dining room for male inmates, it has fallen into a very bad state of disrepair. It was condenmned by the state fire marshall several years ago. The numerous recommendations he made at that time have not been carried out. The excuse given, and it has considerable force, is that Norwalk is waiting to see whether the state will set up some form of institution for the aged, infirm, and chronically ill. The situation is the same in many other towns.

The general character of the management and consequently of the care given the patients corresponds with the character of the physical plant. Over-all responsibility for the conduct of almshouses is vested in the board of selectmen in 23 towns, and in the welfare commissioner in 15 towns. In Killingly the powers of the selectmen have been taken over by the town manager. The Greenwich municipal hospital is in charge of the board of health and health officer. In 11 of the 15 towns with welfare boards the welfare commissioner supervises the manager of the almshouse. In the other four the manager of the almshouse reports directly to the welfare board. With few exceptions, the almshouse managers have no professional qualifications for the headship of an institution. The common

TABLE II

FARM EXPENSE, VALUE OF FARM PRODUCTS, AND INVESTMENT ITEMS FOR 24 TOWN FARMS DURING A 12-MONTH PERIOD BETWEEN JULY 1, 1942 AND JUNE 30, 1944

	Production Items				*Investment Items—Farm Items Only*		
	Farm Expense	*Farm Sales*	*Products Consumed*	*Total*	*Land—Assessed Value*	*Other Items*	*Number Acres All Property*
Ansonia	$2,393	$ 436	$1,395+[1]	$1,831+	$ 56,000	Insurance—buildings, equipment, stock—$5,050	100
Bridgeport	2,000	....	4,000[2]	4,000	113,300		130
Danbury	4,551	....	8,281[1]	8,281	2,910	Assessed buildings—$9,440 Insurance—buildings, stock—$13,100	70
Enfield	6,138	3,365	4,300[3]	7,665	5,000	Inventory—equipment and livestock—$7,100	300
Groton	3,678	2,189	1,656+[1]	4,845+	2,790	Insurance—buildings—$4,550	60
Killingly	4,206	3,861	2,560[1]	6,421	5,000	Insurance—buildings—$15,225	65
Manchester	3,853	1,683	3,117[4]	4,800	13,416		30
New Britain	5,054	342	5,210[4]	5,552	No data	Insurance—buildings—$10,700	50
New Milford	3,269	1,469	986[6]	2,455	5,000	Assessed equipment—$2,000 Insurance—buildings—$6,000	200
Norwalk	3,339	668	3,932[1]	4,600	24,680	Insurance—buildings—$8,000	65
Norwich	3,466	130	4,060+[1]	4,190+	12,000	Insurance—buildings, stock—$20,000	75
Plainfield	4,304	3,607	1,719[6]	5,326	1,030	Assessed buildings, stock, machines—$5,341 Insurance—buildings, equipment, stock—$3,450	65
Plymouth	5,730	6,257	1,097[6]	7,354	25,000	Excellent buildings, equipment, and stock	128
Putnam	4,221	2,035	790[1]	2,825	1,745	Assessed buildings—$4,960 Insurance—buildings, equipment, stock—$6,388	185
Simsbury	9,718[5]	8,014	840[1]	8,854	7,660	Inventory—machinery, stock—$7,831	140
Southington	5,675	5,810	1,193[4]	7,003	5,945	Assessed buildings—$3,875 Inventory—equipment, stock—$11,395	100
Stamford	3,925	53	4,400[1]	4,453	57,570	Assessed buildings—$7,240 Insurance—buildings—$14,500	80
Stonington	2,710	1,853	2,097[1]	3,950	3,360	Insurance—buildings—$5,000 Inventory—stock, equipment—$5,033	140
Torrington	3,506	601	3,372	3,973	3,750	Assessment—buildings—$3,730 Insurance—buildings, equipment, stock—$5,900	200
Vernon	2,125	....	900+[1]	900+	5,600	Assessed buildings—$1,500 Insurance—buildings, equipment—$5,825	68
Wallingford	1,600	656	694[1]	1,350	3,900	Insurance—buildings—$11,700	25
Waterbury	5,133	345	2,988[1]	3,333	80,000		200
Windham	4,262	517	2,500-3,500[4]	3,017-4,017	12,265	Insurance—buildings—$12,554	60
Woodstock	3,867	4,561	760[5]	5,321	925[4]	Assessed—stock—$5,655 Insurance—buildings, equipment, stock—$5,100	135

[1] Joint estimate.
[2] Their estimate of quantity; our estimate of value.
[3] Joint estimate of quantity; our estimate of value.
[4] Their estimate.
[5] Estimate.
[6] 30c per eating day (inmates and management).

arrangement (31 towns) is to hire a man and his wife, or in two cases a man and daughter, the man to run the farm and the woman to run the house. In two or three instances a widow or widower has held on alone after the death of his consort. The exceptions to the general rule are Hartford where the almshouse is under the direction of the supervisor of the municipal hospital; Bridgeport where the almshouse is run like a hospital, with a resident physician, a supervisor of nurses and a business manager; and Greenwich and New Milford where the institutions are headed by registered nurses.

Among almshouse managers and matrons we have found a number of good farmers and good housekeepers, but that is as far as we can go in commendation except in a few cases like the municipal hospital in Greenwhich or the Bridgeport almshouse. These are the only places providing any form of occupational therapy. In most instances nothing is done to provide even the simplest forms of recreation. The inmates receive physical care only and even their physical well-being is not too well looked out for. Only 11 almshouses are licensed as convalescent homes by the state department of health. Six of these have hospital or "chronic" wards where special attention is given to bed patients. In the other five the manager or matron is a registered nurse or a certified trained attendant. In another five the matron is either a registered nurse or has had nursing experience. In the remaining 23, inmates get medical attention when the manager, matron, or their superiors on occasional visits, think it necessary to call the doctor.

The farms attached to 24 of the 39 almshouses no longer can be said, except in a few cases, to contribute anything financially or otherwise to the care of the aged, infirm, and chronically ill. Very few of the inmates are capable nowadays of any kind of farm work. This situation may change somewhat when the demand for labor in productive industry slackens, but it is doubtful if the farms can ever be worked again chiefly with inmate labor. The only inmates capable of working on the farms, as we have previously pointed out, are chiefly alcoholics. They are not "committed" to the town farms and cannot be made to remain in them against their will. To set them at hard work merely shortens their stay at the farm.

It is very difficult to tell from the records of most town farms whether or not the farming operations pay. In only two cases, Woodstock and Southington, did the sales of produce from the farms exceed farm expense as it appears on the town books, and in both the margin of "profit" was small. When estimates of the value of farm products consumed by the inmates and staff are added, 16 of the 24 farms show a favorable balance. These figures do not, however, include any allowances for return on capital invested, for depreciation, or for the time superior town officials spent in the supervision of farm activities. We have been assured by some of the most competent town officials that, irrespective of apparent favorable balances, their farms did not pay. There are, of course, variations from year to year in the relation between cost and the total value of farm products, but for their last fiscal years completed prior to June 30, 1944, only six of the 24 farms seem to have been clearly profitable

TABLE III

COST OF OPERATION OF THE ALMSHOUSES AND TOWN FARMS IN 39 TOWNS IN A 12-MONTH PERIOD BETWEEN JULY 1, 1942, AND JUNE 30, 1944

Town	*Fiscal Year Ending*	*Gross Cost of Operation*	*Receipts*	*Net Cost of Operation*	*Number of Inmate-Days*	*Cost Per Inmate-Day*	*Recoveries From Individuals For Inmates*
Ansonia	10-14-43	$ 12,910.03	$ 586.72	$ 12,323.31	6,479	$1.90	$ 45.00
Bridgeport	3-31-44	191,500.00	.....	191,500.00	124,691	1.54	.....
Danbury	6-30-44	24,927.28	.....	24,927.28	14,290	1.74	2,132.48
Enfield	8-31-43	15,559.99	3,364.97	12,195.02	11,686	1.04	.....
Glastonbury	8-31-43	3,625.53	1,478.32	2,147.21	1,825	1.18	.....
Greenwich—Town Farm	12-31-43	17,215.46	.....	17,215.46	10,486	1.64	6.00
Greenwich—Municipal Hospital	12-31-43	55,288.59	.....	55,288.59	8,828	6.26	12,720.37
Groton	8-31-43	9,006.71	2,189.10	6,817.61	2,189	3.11	.....
Hamden	9-30-43	1,924.22	300.00	1,624.22	912	1.78	.....
Hartford—Municipal Home	3-31-44	106,776.97	.....	106,776.97	85,677	1.25	2,227.64
Hartford—East Hospital	3-31-44	63,322.60	.....	63,322.60	16,587	3.82	2,644.63
Killingly	6-30-44	8,123.32	3,872.61	4,250.71	4,062	1.05	10.90
Manchester	8-15-43	17,773.41	1,682.85	16,090.56	9,951	1.62	1,210.25
Meriden	12-31-43	11,649.79	.....	11,649.79	13,440	.87	.....
Middletown	4-30-44	8,483.01	.....	8,483.01	5,207	1.63	.....
Naugatuck	3-31-44	10,697.95	.....	10,697.95	8,638	1.24	613.41
New Britain	3-31-44	34,327.70	341.96	33,985.74	30,386	1.12	1,209.00
New Haven	12-31-43	84,935.65	.....	84,935.65	87,807	.97	4,005.16
New London	9-30-43	30,506.37	.....	30,506.37	27,940	1.09	877.70
New Milford	9-30-43	7,085.02	1,468.70	5,616.32	2,190	2.56	.....
Norwalk	9-31-43	13,018.77	668.45	12,350.32	11,946	1.03	150.60
Norwich	9-16-42/8-31-43	13,134.43	200.00	12,934.43	10,713	1.21	300.00
Plainfield	8-31-43	8,848.47	3,606.95	5,241.52	5,201	1.01	.....
Plymouth	8-15-43	10,220.63	6,256.97	3,963.66	5,475	.72	73.83
Putnam	8-31-43	7,339.14	2,072.26	5,266.88	3,397	1.55	.....

TABLE III (Continued)

COST OF OPERATION OF THE ALMSHOUSES AND TOWN FARMS IN 39 TOWNS IN A 12-MONTH PERIOD BETWEEN JULY 1, 1942, AND JUNE 30, 1944

Town	*Fiscal Year Ending*	*Gross Cost of Operation*	*Receipts*	*Net Cost of Operation*	*Number of Inmate-Days*	*Cost Per Inmate-Day*	*Recoveries From Individuals For Inmates*
Salisbury	8-31-43	$ 3,218.12	.....	$ 3,218.12	1,229	$2.62	.....
Simsbury	6-30-43	12,911.42	$8,013.93	4,897.49	2,190	2.24	.....
Southington	8-31-43	10,662.05	5,859.87	4,802.18	4,122	1.17	$408.27
Stafford	8-31-43	6,312.21	.....	6,312.21	5,139	1.23	.....
Stamford	9-30-43	18,091.41	53.10	18,038.31	13,968	1.29	117.40
Stonington	7-31-43	7,324.91	1,853.16	5,471.75	5,840	.94	49.00
Suffield	8-31-43	4,136.96	143.78	3,993.18	2,495	1.60	.....
Thompson	8-15-43	5,339.35	41.00	5,298.35	3,324	1.59	390.00
Torrington	8-31-43	9,213.94	935.02	8,278.92	7,138	1.16	.....
Vernon	8-31-43	7,749.12	150.00	7,599.12	6,862	1.11	.....
Wallingford	9-30-43	7,841.03	655.75	7,185.28	5,475	1.31	517.00
Waterbury	12-31-43	34,134.42	393.00	33,741.42	34,036	.99	555.66
Wethersfield	6-30-44	600.00[1]	.....	600.00	366	1.64	.....
Winchester	8-31-43	3,145.82	.....	3,145.82	1,843	1.71	.....
Windham	9-15-43	13,510.92	517.00	12,993.92	8,621	1.51	428.00
Woodstock	8-31-43	5,921.67	4,586.51	1,335.16	2,300	.58	26.00
TOTALS		$918,314.39	$51,291.98	$867,022.41	614,951	$1.41	$30,718.30
		Recoveries from individuals for inmates		30,718.30			
		Cost to towns		$836,304.11			

[1] Estimated.

when all factors are considered. Some others undoubtedly were profitable on the "bear-by-the-tail" principle that they had the farm and could not easily get rid of it.

In several instances where farm sales are large they greatly exceed the value of farm products used in the almshouse. In other words, these towns are in the farming business with only an incidental relationship to the care of the aged, infirm, and chronically ill. The theory of the town farm originally was that the inmates could work on it and earn part of their keep. This would, it was held, be good for them and the town. With the practical disappearance of able-bodied inmates this reason for a town farm as an adjunct to an almshouse has disappeared too. Running a large dairy with hired labor is not a necessary incident to operating an almshouse. On general principles it is not desirable that a town should be engaged in farming or any other business for mere profit, much less for loss. In one respect the farm is a positive hindrance to good almshouse management in that it causes the towns to pick their almshouse managers for their farming ability, not for their capacity as institutional directors.

In figuring the net cost of operating the almshouses as almshouses for the purpose of arriving at per-inmate-day costs we have deducted in each case the receipts from farm sales from the gross cost of operation as it appears in the town reports. We have divided this figure by the number of inmate-days as reported to us. The resulting figure represents as nearly as we can determine the cost per day of caring for an inmate in the almshouse. The expense to the town is somewhat less, for there would still remain to be deducted the payments made by the state for the care of persons without settlement and the amounts recovered from individuals which are in a few cases considerable. The net cost of operation for all almshouses, after deducting farm receipts, for the last fiscal year of each town ending prior to June 30, 1944, was $867,022.41. This does not include depreciation, capital charges, or allowances for the time of town officials, but merely cash outgo. The per-inmate-day cost ranged from 58 cents in Woodstock to $3.11 in Groton, $3.82 in the Hartford chronic ward, and $6.26 in the Greenwich municipal hospital. The average was $1.41. The receipts from the state were $236,719.11, and the recoveries from individuals $30,718.30.

For most towns the cost of caring for almshouse inmates is low. In six of them it is very low—between 58 cents and $1.00. In three of these it is due in part to successful farm operation. The remaining three are good-sized institutions with rather modest standards of care. Of the 41 institutions listed in the accompanying table 22 have per diem costs of less than average. In general, low cost is due to neglected buildings, scanty furnishing, and care largely restricted to mere food and lodging. Bridgeport's $1.54 per inmate-day, however, is an example of how cheaply a relatively good grade of care can be provided in large units.

From our study of the almshouses we arrive at the following conclusions:

1. Local almshouse care of the aged, infirm, and chronically ill, while in many cases cheap, is frequently of poor quality.

2. Successful local almshouses at moderate cost are impossible except in large communities or in the rare case of really profitable farm operations.

3. Since there are so few large communities, it becomes necessary for the state to assume the responsibility for providing institutions for that class of persons now maintained in local almshouses.

4. As the towns cannot very well be compelled to give up their almshouses, it will be necessary for the state to inaugurate the program by transferring to the proposed state institutions the so-called state-aid cases now cared for in local almshouses, and then receive such other almshouse inmates as the towns may voluntarily send to the new institutions, charging the towns the actual average cost of their care.

5. In view of the critical physical condition of certain almshouses, and especially of Hartford's project for the replacement of her present almshouse, the state should settle at once what its policy is to be concerning the construction of institutions for the care of almshouse inmates.

Town and State-aid Cases in Boarding and Convalescent Homes

It has been difficult to obtain from the towns the data on which to base a study of the cost of present care of the aged, infirm, and chronically ill in boarding and convalescent homes. In many instances no systematic records are kept of rates paid, days boarded, supplementary expenditures for medical attention, clothes, etc. These cases are usually classified simply under the head of general outdoor relief, and it becomes necessary in picking them out to review all outdoor relief cases. Only someone personally familiar with all the cases is able to distinguish which are convalescent- and boarding-home cases. After some four months of effort, persistent follow-up, and in many instances personal telephone calls and trips to the town offices, we have been able to assemble data on the number of cases and costs for their last completed fiscal year in 144 of the 169 towns of the state. All of the 25 towns for which we did not secure information are small, under 4,500 in population, and together embrace less than three per cent of the state's population.

The back records are so inadequate and there have been so many shifts in personnel in the last decade in town offices, that our data on earlier years is far less complete. However, we have been able to secure figures for the fiscal year 1939-1940 from 106 towns embracing 43 per cent of the state's population, and for the fiscal year 1935-1936 for 82 towns embracing 31 per cent of the state's population, with the following results:

Convalescent- and Boarding-Home Cases

	Number of Cases Excluding Those Receiving O.A.A.	*Number of Cases Including Those Receiving O.A.A.*
In 82 Towns		
1943-1944	335	456
1939-1940	380	471
1935-1936	343	394
In 106 Towns		
1943-1944	468	648
1939-1940	498	620

It is obvious that the demand for convalescent- and boarding-home care has not followed the economic trend as has been the case in town-farm population. When cases receiving some old age assistance are considered, it has in the last four years even reversed the general downward tendency of all relief. It may be safely inferred therefore that boarding- and convalescent-home care has been taking the place of town-farm care. This tendency will probably continue in the event that no further action is taken by the state. This is still further evidenced by the growth in the number of boarding and convalescent homes licensed by the state welfare and health departments respectively.

Year	*Chronic-and-convalescent Homes*	*Boarding Homes*
1935	107	145
1937	116	163
1939	157	210
1941	191	243
1943	186	228
1944[1]	191	230

[1] There are 114 institutions in 1944 which have both the license from the Health Department and the Public Welfare Council, and there are presumably similar duplications in the earlier figures.

It has been impossible to secure full information on all the 755 cases, exclusive of old age assistance cases, reported by the towns in convalescent and boarding homes, but 554 of them, or 73.37 per cent, we find, received care for 139,131 patient-days, or an average in the course of one year of 251 days each. On the assumption that all of the cases required a like amount of care there would be involved 189,505 patient days, or for each day in the year about 519 patients. The average per-patient-day cost was $1.69, but this does not represent the full cost of care. It is obvious from the figures returned that in a considerable proportion of the cases what the town paid was only a supplement to the resources of the patient himself or to aid from private agencies. Rates reported ranged from 23 cents per day to $7.00. The reports do not distinguish clearly between convalescent- and boarding-home cases. Costs in the former naturally are higher than in the latter. It is obvious that full care of neither kind can be furnished for 23 cents a day or anything like it. Including all these low rates, however, the median of all cases reported is about $14.00 a week. The median full cost would be much higher.

Of the 755 individual cases reported 369 were persons without settlement, for whose care the state compensated the towns in the amount of $155,452.42. There were 386 town cases for which the towns spent $131,981.27.

We have no data on the quality of care in convalescent and boarding homes. The fact that they are licensed by the state should indicate that they possess at least the minimum requisites of decent care of their particular kind. We would, however, emphasize the incontestable fact that good boarding-home or convalescent-home care on a commercial basis cannot be provided in small units except at a relatively high price.

These facts lead to the conclusion that the state should transfer to the

institutions previously referred to the persons without settlement for whose care the state is financially responsible, and should open these institutions to such town cases requiring institutional care as the towns may wish to send them, the towns to pay the actual cost of their care.

Old Age Assistance Cases

There remains the large group of cases now maintained in convalescent homes under the old age assistance (including aid to the blind) program, at the expense of the state and federal governments. This group has become much more important since the 1943 legislature provided for the state's paying the cost of medical and hospital care for persons on old age assistance outside the maximum grant of $40 per month. This has relieved the towns of the need of supplementing old age assistance grants in the cases of persons needing such care. It has also enabled the towns to eliminate from their almshouses nearly all citizens of the United States 65 years of age and over.

Accurate figures on the number of persons in convalescent homes receiving old age assistance are available only since July 1, 1944. In the ensuing four months the average number of such persons has been 609. The regular convalescent-home and medical cost for these persons for the four months has been $222,088.75, of which the state has paid $173,873.75 and the federal government $48,215.00. For a 12-month period this would be $666,266.25, of which the state would pay $521,621.25 and the federal government $144,645.00.

The combined federal and state per-patient cost varies from $10 to $180 per month. The median is between $86 and $90 per month.[1] Here again, it is obvious that many of the smaller allowances are merely supplementary to the patient's resources or to aid from private agencies. The actual average cost of the care supplied would be considerably higher.

In discussing the advisability of transferring old age assistance cases of any kind to a state institution it is important to bear in mind the federal share which is one-half of each grant up to $40, but in no case exceeds $20, and that persons in public institutions are not eligible to old age assistance under the terms of the social security act. In every old age assistance case therefore transferred to a state institution the federal grant would be lost. For instance, if an old age assistance client now receiving a $40 grant—half from the state and half from the federal government—were transferred to a state infirmary where the cost was $60 per month, the state instead of paying $20 would have to pay $60, an increase of 200 per cent. This leads to the conclusion that while care in a state institution might on the whole be preferable to present care in convalescent homes, boarding homes or outside of institutions altogether, the state cannot afford at present to assume increased costs and at the same time lose the federal contribution. As will appear later, Dr. Heiser's minimum estimate for operating a state infirmary, plus the interest and principal payments on the capital invested in its construction, comes close to $60

[1] There is a small additional cost to the state for emergency medical care for these cases, but it is impossible to segregate it from the total of such charges for all old age assistance cases.

per month. The transfer to a state infirmary, therefore, of any person now in a private convalescent home and receiving a grant of less than $80 a month would actually cost the state money. On all transfers where the grant is in excess of $80 the state would benefit. We have found that if the state transfers from convalescent homes to the proposed infirmaries the 438 persons receiving grants of from $60 to $135 a month the net gain to the state would be sufficient to enable the state to break practically even on the whole program. This would seem to indicate that other old age assistance cases, whether or not in convalescent homes, should be cared for as at present, until we have a clearer picture of the postwar status of state finances and further light on the federal government's policy regarding old age assistance.

FINANCIAL EFFECT

On the basis of the foregoing analysis the state would have to provide for 2,429 patients, including the 1,472 now in the almshouses, 519—the average daily number of town and state charges now in convalescent and boarding homes, and 438 old age assistance cases now in convalescent homes. This does not include old age assistance cases in convalescent homes receiving less than $60 or more than $135 a month from state and federal sources. The former are omitted for reasons already discussed, and the latter because they probably involve a type of care which would require the equivalent of general hospital treatment.

We have endeavored to exclude altogether cases requiring general hospital treatment from our calculations because, in our opinion, this is another problem with further ramifications of its own which should be considered more thoroughly. The accepted standard of hospital service is one bed for each 200 inhabitants in cities and 500 in rural districts. The present supply of general hospital beds in Connecticut, according to the American Medical Association list, is one bed for each 249 persons, taking city and country together. While war conditions and the Connecticut habit of using hospitals freely are currently keeping the hospitals crowded, many of them have extensive postwar building programs—in several instances with the necessary funds already contributed. It seems therefore that there is scarcely that sort of emergency in the hospital situation which would justify the state in constructing new hospital facilities at least until the medical-care phase of federal social security legislation has been settled by Congress. We have not included in our calculations the 620 persons estimated by Dr. Heiser to be in state mental institutions who could more properly be cared for in infirmaries of the type now under consideration. If it is decided to take care of them in this way it may be regarded merely as a subtraction from the expansion of state hospitals for the mentally ill now being urged by the managements of these institutions.

In estimating the number of beds to be provided in the proposed program, we have allowed about 25 per cent for possible expansion, bringing the number to 3,000. Operating costs have been figured on the 2,429 cases the transfer of which we have suggested. This should give a fair estimate of the cost for the first full year of operation.

Table IV

Comparison of Cost of Caring For Aged, Infirm, and Chronically Ill Under Present and Proposed Methods, Assuming All Are Cared For In Infirmaries

	Average Number of Persons to be Cared For	*Amount Now Paid*			*Cost at High Estimate*			*Cost at Low Estimate*		
		Total	*By Towns*	*By State*	*Total*[1]	*To Towns*[3]	*To State*[3]	*Total*[1]	*To Towns*[3]	*To State*[3]
From almshouses	1,472	$836,304	$599,585	$236,719	$1,262,169	$904,975	$357,194	$1,015,007	$727,760	$287,247
Town and state charges in convalescent and boarding homes	519	287,433	131,981	155,452	445,017	204,352	240,665	357,873	164,335	193,538
Old age assistance cases now in convalescent homes and hospitals	438	388,116	.....	388,116[2]	375,564	.....	375,564	302,020	.....	302,020
Total Cost	2,429	$1,511,853	$731,566	$780,287	$2,082,750	$1,109,327	$973,423	$1,674,900	$892,095	$782,805

[1] There would be some slight recoveries from individuals, possibly $50,000.

[2] In addition to this sum, the federal government contributes $20 per month per case, or a total for one year of $105,120.00.

[3] On the basis of the towns paying 71.7 per cent and the state 28.3 per cent of cost for former almshouse patients, and the towns paying 45.9 per cent and the state 54.1 per cent for town- and state-aid cases transferred from boarding and convalescent homes, their present division of costs for these cases.

The transition from the present to the proposed method of caring for these cases is likely to take some time. The state cannot arbitrarily force towns to give up their local almshouses, and it may be several years before the advantages of the change are fully realized by all of the towns. This means that the building program might well be spread over several years. If this program is to be undertaken the state should consider building the first unit in the Hartford area to save that city the necessity of building a new almshouse of its own which would undoubtedly further delay if not prevent consummation of the proposed change.

Some reduction from the cost of building construction estimated by Dr. Heiser might be secured by using, so far as adaptable to the program, the better large local almshouses such as those in Bridgeport, Stamford, and New London. It is possible also that a further saving in both construction and operation could be brought about if a portion of the cases could be accommodated in institutions of the boarding-home rather than the infirmary type. This is suggested in Dr. Heiser's report but there is no definite evidence before us as to the number of these cases, and such information as is supplied as to the relative costs of the two kinds of care is inconclusive.

In the accompanying table we show the present cost to the state and local governments of caring for the three groups of patients proposed for tranfer, in comparison with the probable cost to the state and local governments of their care in state-operated infirmaries. In preparing this table we have used Dr. Heiser's estimates of the cost of constructing infirmaries—$1,000 to $1,200 per bed, and the cost of operating them—$600 to $750 a bed per year. We have added the cost of debt service based on 20-year bonds for the amount of the construction cost, at 2.25 per cent interest.

The total cost of construction on the low estimate would be $3,000,000, on the high estimate $3,600,000. Interest for the first year would be $67,500 or $81,000. Annual principal installments would be $150,000 or $180,000. Operating costs for 2,429 patients at $750 would be $1,821,750; at $600 they would be $1,457,400. This gives us

	High Estimate	*Low Estimate*
Operating costs	$1,821,750	$1,457,400
Debt service	261,000	217,500
Total operating costs	2,082,750	1,674,900
Annual cost per inmate	857.45	689.54

The result of carrying into effect the proposed program would be to increase present costs to the state and the towns as follows:

	High Estimate	*Low Estimate*
State	$193,136	$ 2,518
Towns	377,761	160,529
Total	$570,897	$163,047

From these figures there should be deducted an indefinite sum representing recoveries from individuals. Such recoveries, amounting to $30,718, were

deducted from the present cost of operating local almshouses. The sums contributed from private sources to the support of town cases in boarding and convalescent homes and to the support of old age assistance cases were not included—because they were not known—on the present cost side of Table 4. Presumably the total of such recoveries or contributions will be at least as great under the new arrangement as under the old. It would, as applied to the low estimate, obviously transform the state's small unfavorable balance into a favorable balance. At least the equivalent of the $30,000 of recoveries deducted from town almshouse costs on the present cost side should be deducted from town costs under the suggested program.

We have already referred to the hidden costs of local almshouse operation—the allowances which should be and are not made for capital investment, depreciation, and the time of superior officers devoted to almshouse matters. Consideration should also be given to the considerable sums which towns might obtain by the sale of almshouse property and the advantages to be derived from getting out of the—at best precarious—business of operating farms. In this connection the view expressed by the mayor of a city whose almshouse inmates are now cared for at a nominal figure of about $7.00 a week, that he would consider placing them in a state institution at $15 a week a good bargain for his city, is very pertinent. His opinion was not merely based on the avoidance of a disagreeable and time-consuming responsibility, but on the fact that the city could, by itself, secure really humane treatment for its charges only by a large capital outlay. There are several cities and towns in a similar situation.

The chief difference between the recommendations of the Research Division of the Public Welfare Council and the suggestions of this report center in some 3,000 old age assistance cases which the former says should be taken care of in state institutions. A few of these, receiving grants of less than $60 a month, are now cared for in convalescent homes. The remainder, for the most part receiving grants of $40 per month or less, are cared for in boarding homes or, like the rest of the community, live with their families or by themselves in houses, apartments, or lodgings. We do not propose to argue the question of whether their lot would be improved by transfer to a state institution. It seems decisive at this moment, when the future of federal social security and of the state's postwar revenues are both unknown, that their inclusion in the program would cost the state upwards of a million dollars a year more than their care now costs.

This report has been prepared on the assumption that no change is contemplated in the general fiscal relations of the state and its civil divisions or in the present dual basis of administering public assistance. This is not to be taken as indicating approval of either of these present policies. It is obvious that alterations in state-local fiscal relations or in the public assistance setup might involve an entirely different distribution of costs between the state and the towns than the one indicated in this report.